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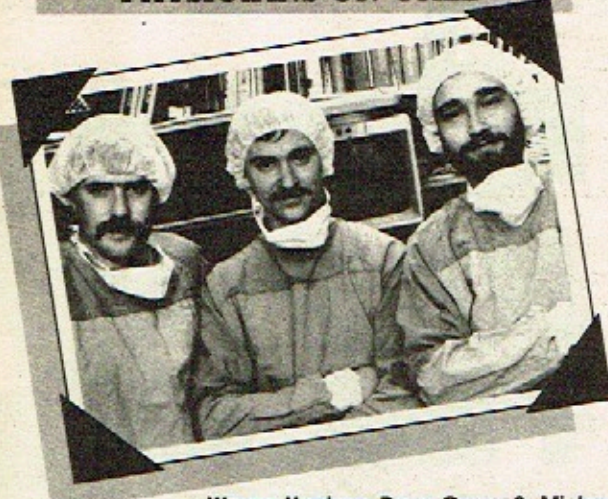
Vol. 1 No. 2 March 1988

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Wayne Harrison, Doug Casey & Michael Spissinger

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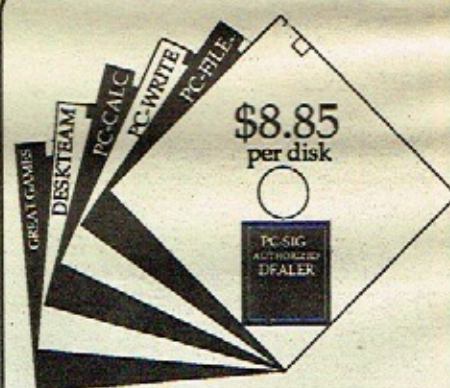
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British Columbia's Computer Information Source

March 1988

THE COMPUTER PAPER

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Letter from the Editor

Thanks for the responses, our reader's survey is still being tabulated, but from the rate of response, we seem to have hit on a much needed publication. Our advertisers tell us you are giving them a good response as well. We appreciate it when you mention where you saw their ads. This helps us to sell ads, and the more ads we sell, the more coverage we can provide of the local scene.

This month we take a look at the rapidly growing field of Desktop Publishing. We start off with the latest rage in the "Desktop" field: Desktop Presentations. It is no surprise that the technology is being channeled into support for presentations. The real slick presentations these days are actually incorporating computers into the presentations via special attachments to projectors which allow the data to be "live". But I will leave the rest of the story to Bruce Wright.

I met Daken Ariel a while ago at a Vancouver Electronic Publishing Association (VEPA) meeting. When it came time to prepare this month's issue, I thought who better to lay the foundations than Daken with his depth of background and clear explanations.

Another old friend Zoey Brown gives the perspective on the state of the art, vs existing technology.

Desktop Publishing has created a great need for training as it puts many people into both new technology (computers) and new ideas (design). Mary Jane Devine gives some perspectives on the need for training and the needs of people in training.

And what publication on DTP can help but get into the debate of which program is best? Gordon Field of Mostly Mac in Surrey gives his version of "who is the fairest DTP program of all"

Dave Allen from PaNorAmA, the local Amiga user group, a militant and regular Amiga user, buttonholed us about the Amiga's new found capabilities. So we said we would give him some real estate for his views. Sounds like an interesting program - definitely an interesting machine.

Gordon Field gives us a perspective on the Shareware Alternative with a look at a powerful and inexpensive word processing program: PC-WRITE.

One of the benefits to belonging to the VEPA is that they occasionally sponsor an open house. This month we got an invitation to SYTEC. A fast moving company in a rapidly growing area.

Our calendar is bigger and better this issue. If your association or company has a listing, let us know, we will try to fit it in. If you attend one of these courses or meetings please tell the people running the event where you saw the listing for their course. And yes, we did get more than one classifieds this month. Remember the classified ads are FREE for individuals. Let us help you sell your products and services.

The reader survey is back, in a new and improved form. It is in an easily photocopyable size, has the address right on it and includes two new questions, one of which tells us where you picked it up, and the other which leaves more room for your comments. Thanks to all of you who sent them in, it is great getting the kind of supportive feedback that we did. If you want to get on our mailing list, be sure to fill it in and send it along and we will send you future issues.

Hope you enjoy the issue.
- Kirtan Singh Khalsa

Next Month in
THE COMPUTER PAPER:
Vancouver
Software
Companies
and more!

Contents

Departments

NEWSBYTES

CD-ROM	4
Canadian Newsbytes	4
Desktop Publishing	6
General	6
Local Area Networks	6
Macintosh	6
MicroChips	4
The Stock Market	7
OS/2	8
PC	8
Unix	19

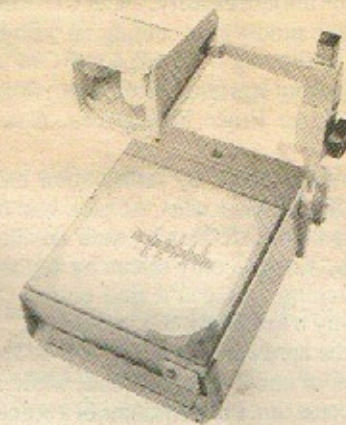
Computer Calendar 16

Classified Ads 19

Features

Desktop Presentations

From Computer to Overhead Projector 9



Interview with Daken Ariel

an introduction to Desktop Publishing 10

DTP vs Traditional Typesetting

which is better? 11

Training in Desktop Publishing

why train? 12

The Battle of the Page Continues:

Quark 2.0 and Pagemaker 3.0 13

The Shareware Shelf:

PC-WRITE 17

DTP on the Amiga

PROFESSIONAL PAGE brings new talents to
a talented machine 15

Sytec Pushes DTP to the Limit

Hi-tech Silk Screening 15

NEWSBYTES

CD-ROM

NEWS ON CD-ROM COMES FROM USERS

CHICAGO (NB) — Jack Dreiss of Arthur Andersen & Co., the Big Eight accounting firm, says it's a competitive advantage to give auditors a stack of rule books on CD-ROM drives inside laptop PCs. Hospital emergency rooms are switching to CD-ROMs to get Micromedex, Mead Data Central's poison control database, on CD. Ken Shain's Geovision Inc. is making money selling U.S. Geological Survey Maps as a \$249 CD called "Windows on the World." Lotus Development is making more money than anyone repackaging data on corporations for bankers, brokers, and investors. Meanwhile, in Japan there's a mounting CD audio player glut which could turn into a CD-ROM drive price war aimed at Hitachi, which owns the U.S. market through its OEM, Amdek.

Microsoft's 3rd annual CD-ROM conference in Seattle March 1-3 is called "The Industry Emerges." Look for hypertext development kits, Microsoft's multimedia dictionary on CD-ROM, plus the usual raft of database owners and software publishers. If something emerges as a "standard" user interface, CD-ROM will exceed its 400% projected growth rate for 1988. CONTACT: Jack Dreiss, ARTHUR ANDERSEN & CO., (312)580-0669

OPTICAL STORAGE HAMPERED BY LACK OF STANDARDS, WEAK SOFTWARE

ATLANTA (NB) — CD-ROMs are the coming thing for storing masses of information. A single disk you can hold in your hand can contain up to 275,000 pages, or 550 megabytes, of information. Even a huge online database can fit on a single CD-ROM. And, since the CD-ROM drive is similar to the CD audio player, it can be made cheaply; Amdek's Hitachi-made drive costs just \$700. People have been predicting for years that CDs would soon overtake both floppies and hard drives as the storage medium of choice.

Why haven't they? One reason noted by Ken Shain of Geovision, producers of the GeoDisc CD-ROM with mapping data from across the U.S., is that developers underestimated how long it would take to organize the data on a CD-ROM so it could be retrieved easily. Other CD-ROM developers note that each producer is coming up with their own search software, so flipping from one CD-ROM to another is more like going from learning WordStar to WordPerfect than from listening to Bruce Springsteen, then Michael Jackson.

A third weakness noted by information broker Rob Aaron of Aaron-Smith Associates, Atlanta, is in the search software put onto the CD-ROMs by their developers. He says it's crippled. "You can only search by key words. It's not free-text searching," as you'd find online. "It's only searchable the way a printed index would be." The real problem is in the hardware, he adds. "CD-ROM players have access times of about a half-second, while magnetic media measure access times in millionths of a second. So it's hard to get the type of searching you'd get on Dialog or Lexis with the same database on CD-ROM. As a result, the flexibility is much reduced." The future may have to wait. CONTACT: Ken Shain, GEOVISION (404) 448-8224; Rob Aaron, AARON-SMITH ASSOCIATES (404) 688-6024

MICROCHIPS

CHIP BREAKTHROUGHS FROM IBM, GE, AND JAPANESE

SAN FRANCISCO (NB) — Several impressive new milestones have been reached in the semiconductor world, according to news coming from the International Solid State Circuit Conference. IBM says it has perfected the technology required to create the world's fastest DRAM chip. IBM's version retrieves a bit of information in just 20 billionths of a second — three times faster than current DRAMS.

General Electric announced a 32-bit chip with a very fast speed of 40 MIPS or millions of instructions per second. And from Texas Instruments and Rockwell International came yet another sign that gallium arsenide may soon replace conventional silicon in wafers. The two firms

showed chips based on this new material which is claimed to be cooler and faster than silicon.

But the biggest news came from the Japanese. NEC presented a paper claiming the world's fastest one kilobit RAM chip based on superconducting material. For speed, check out this access time — one bit in 570 trillionths of a second. Matsushita, Hitachi, and Toshiba also unveiled DRAMs which each hold 16 megabits of information. Don't expect to see them around, however, until at least 1991 or 1992.

CHIP SHORTAGE PLAGUES VALLEY

SAN FRANCISCO (NB) — While chip makers from around the world were in San Francisco trading news on the next generation of chips, Silicon Valley was complaining that it couldn't get enough of the current one's. In short supply are 256K and 1 megabit chips which for the most part are imported from Japan. Japanese firms claim the short fall is due to conversion of production lines from 256K to 1 megabit chip production. Meanwhile, the sudden shortage has pushed up the price from less than \$2 for a 256K DRAM last year to over \$3 today.

In a related story, Apple Computer has reportedly appointed a task force to look into whether the firm should make its own semiconductors. The task force is also charged with pinpointing future suppliers of custom chips called ASICs. The task force is expected to report its findings at the end of March.

MOTOROLA UNVEILS ITS RISC CHIPS

CHICAGO (NB) — Motorola is facing real competition for its new RISC chip series, designed for engineering workstations. The Sun SPARC chip is causing a lot of excitement. Last week Motorola fired back by putting out the specifications on its RISC chip set. Look for a 3-chip set which can run at 17 MIPS (million instructions per second), handling up to 50 MIPS in parallel processing. The main processor has both an integer and floating point unit, the first time both have appeared on the same slice of silicon. The two cache chips, one for data and one for instructions, result in a parallel flow of data, called a Harvard-style architecture. Motorola said over 200 companies are reviewing its RISC chip series, and early samples are already being evaluated. The name of the new chip and further details were not released, but all will be unveiled formerly during the second quarter. CONTACT: MOTOROLA, (312)397-5000

TOSHIBA STARTS VOLUME PRODUCTION OF 4M DRAM

Toshiba is expected to lead a 4M DRAM production race. The company will start volume production of its 4 megabit dynamic RAM in its Oita local factory in Southern Japan by the end of this year. For that purpose, Toshiba will modify part of the 1M DRAM facilities to 4M DRAM production lines.

INTEL WILL CUT PRICE OF 80386 MPU: INTEL JAPAN'S PRESIDENT

TOKYO (NB) — Intel will cut the price of its 80386 MPU by 20% by the end of this year, according to Intel Japan's president, who proclaimed the news at a business meeting on February 17. The price cut will be applied to its 20MHz 80386 version. The president says this price cut will be made when chip production is increased at its Albuquerque plant in New Mexico. With this price cut, Intel expects to boost the sales of its 80386 three times higher than sales in 1987.

JAPAN READY TO ENTER 16M-DRAM ERA

TOKYO (NB) — Three Japanese chip makers including Matsushita, Toshiba, and Hitachi, have developed a 16 megabit dynamic random access memory chip. These next generation chips will be shown at the International Solid State Circuit Conference (ISSCC) in San Francisco on Feb. 17. According to industry sources, Matsushita and Toshiba have applied a trench method, while Hitachi has used a stack method to develop these breakthrough chips. However, they are not the first makers to have developed a 16M DRAM. Japan's telecom giant NTT has already developed the same capacity chip, and introduced it at last year's ISSCC.

CANADIAN NEWSBYTES

ASSOCIATION SEEKS MEASURES TO STRENGTHEN SOFTWARE INDUSTRY

MARKHAM, Ont. (NB) — Canadian government, business and educational institutions should be working together to strengthen this country's software industry. So says the York Technology Association, a group representing high-tech companies in the Toronto suburb that is home to about half of Canada's computer industry. (IBM Canada, Apple Canada, Commodore Business Machines and AT&T Canada are all based in Markham.)

Canada missed the boat in computer hardware, the YTA

said in a recent report entitled THE SOFTWARE OPPORTUNITY: A CANADIAN PERSPECTIVE. "We cannot afford to do the same in software," the report contends. The document sets forth 36 recommendations under the headings of public attitude, marketing, financing, business and technical expertise, research and development, intellectual property, international trade and government procurement policies. Among the more significant recommendations, the YTA

- supports current free-trade negotiations with the U.S. and urges the government to launch similar initiatives with other countries,

- wants more generous tax incentives for private-sector research and development,

- calls for a high-profile scientific project to get the Canadian public more interested in science and technology,

- believes science education in Canada needs improvement, and

- wants programs to increase the marketing skills and resources of the software industry.

CONTACT: THE YORK TECHNOLOGY ASSOCIATION, Suite 132, 7305 Woodbine Ave., Markham, Ont. L3R 4V7, (416) 886-1987

WAIT AND SEE ATTITUDE PLAGUES TORONTO COMPUTER MALL

TORONTO (NB) — Several companies are interested in space in Toronto's Computer Mall, but they're all waiting for others to move in first. So far, only one company occupies the mall, completed last spring in the west end of Toronto. Office Equipment Ltd. uses its space there as a demonstration facility. Alain Sutton, president of Computer Malls Ltd., said that while he has several commitments from companies he did not name, most want to see more of the building's space occupied before they move in themselves.

Although things have gone slowly, Sutton said, "I have no doubt in my mind that there is a market ... Toronto is a big market, the need for it is there." He admits that the failures of some similar projects in the U.S. have made potential tenants more hesitant, but says the Dallas Infomart has proven that the computer mall idea can work. In the meantime, Computer Malls is running seminars in the conference centre that makes up part of its building, and carrying on consulting work. CONTACT: COMPUTER MALLS LTD., (416) 675-6500

SOFTWARE 88: NETWORKING AND PLATITUDES

TORONTO (NB) — About 225 delegates were at the Metro Toronto Convention Centre last week for Software 88, a symposium sponsored by the federal Department of Communications and the Ontario Ministry of Culture and Communications. The value of the conference for most was probably best summed up by a delegate overheard talking on a pay phone early on the conference's first day. "It's good," he said, "I've made one good contact already." Delegates were welcomed by the federal and provincial ministers responsible for the conference, both of whom said nice things about the software industry and nothing much else. Other sessions dealt with basics of telecommunications, marketing, export strategies and similar topics.

PAY UP FASTER ON TAX CREDITS, HIGH-TECH FIRMS TELL OTTAWA

OTTAWA (NB) — Canadian firms that qualify for research and development tax credits wait as long as two and half years to get the money. That's one of the findings of a survey by the Canadian Advanced Technology Association (CATA). CATA says the delay is unacceptable, and it's making life difficult for Canadian high-tech companies. The association wants the payments made faster, and it says the government has "overreacted" to scandals surrounding the Scientific Research Tax Credit program in which Ottawa paid out large sums for research that was never done.

The SRTC program cost Ottawa about C\$3.5 billion in foregone tax revenues. About 65 companies are still being investigated in connection with the program, which was closed down in 1985. Seven charges of fraud have been laid. Since that debacle, the government has checked out companies very carefully before paying out tax credits. CATA says Ottawa's caution is destroying the tax breaks' incentive effect, and says the government must find a way to process claims faster.

ONTARIO TO SELL 3 TECHNOLOGY CENTRES

TORONTO (NB) — Three of the Province of Ontario's five technology centres will be sold to the private sector, provided buyers can be found. Rick Winston, a spokesman for the provincial Ministry of Industry, Trade and Technology, told NEWSBYTES CANADA the centres were never intended to be government-run forever. He said the Centre for Microelectronics in Ottawa, the Centre for Automotive Parts

NEWSBYTES are compiled by Wendy Woods (Western USA), Ken Maize (Eastern USA), Dana Blankenhorn (South & Midwest USA), Masayuki Miyazawa and Keizo Yamamoto (Japan), Grant Buckler (Canada), Steve Gold (UK) and Peter Vekinis (Europe). Copyright © 1988 NEWSBYTES



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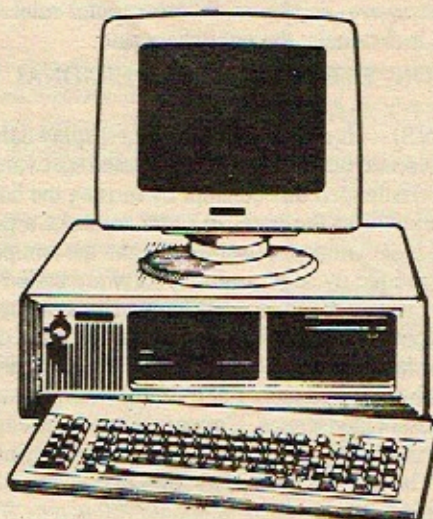
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Dear Reader,

Welcome to the Computer Paper, this is our second issue. We hope you are enjoying it. We would like to start things off right by getting some feedback from you. As an incentive, we will put you on our mailing list if you take the time to fill in the questions below.

The questions are to give us an idea of what's happening to our efforts, and to give us direction as to where you would like to see it go. It also gives us something to tell our advertisers when they ask "who's reading it?" So we encourage you take a few moments and fill in the answers.

1) Which articles did you read? And how do you rate them 1- 10. (10 is good, 1 is bad.)

Name of Article	Rating

2) How many other people read your copy of The Computer Paper?

- | | |
|---------------|---------------|
| 1) Nobody | 2) One person |
| 3) 2-5 people | 4) 6 or more |

3) Do you plan to keep the paper after you read it?

- | | |
|--------|-------|
| 1) yes | 2) no |
|--------|-------|

4) What is your position in the company?

- | | |
|----------------------|-------------------|
| 1) President/CEO | 2) Vice President |
| 3) Senior Manager | 4) Middle Manager |
| 5) Entrepreneur | 6) Consultant |
| 7) Salaried Employee | 8) Other |

5) Are you: 1) Male 2) Female

6) What best describes your office?

- | | |
|------------------|-----------------|
| 1) Branch office | 2) Local office |
| 3) Head office | 4) Other |

7) Do you influence your company's decisions on purchasing, leasing or renting any of the following? Check all those that apply:

- | | |
|------------------------|------------------------|
| 1) accounting services | 2) Desk top publishing |
| 3) computer consulting | 4) computer hardware |
| 5) computer software | 6) office equipment |
| 7) office furniture | 8) computer stationery |
| 9) telecomm. equipment | 10) on-line computing |
| 11) none of the above | 12) other |

8) What category best describes the industry you work in?

- | | |
|---|------------------------|
| 1) retail trade | 2) wholesale trade |
| 3) manufacturing | 4) construction |
| 5) resource based | 6) banking and finance |
| 7) insurance | 8) accounting |
| 9) business services | |
| 10) transport/communications | |
| 11) professional: health, legal, education | |
| 12) professional: engineering architectural | |
| 13) public service/government | |

9) How many employees work for your company in the Vancouver area?

- | | |
|------------|-------------|
| 1) 1-5 | 2) 6-10 |
| 3) 11-25 | 4) 26-50 |
| 5) 51-100 | 6) 101-250 |
| 7) 251-500 | 8) 501-1000 |
| 9) 1000+ | |

10) What is your company size by total annual sales/revenues?

- | | |
|--------------------|--------------------|
| 1) Under \$100,000 | 2) \$100-250,000 |
| 3) \$250-500,000 | 4) \$500-1,000,000 |
| 5) \$1-5 million | 6) \$5 million + |
| 7) other | |

11) How old are you?

- | | |
|-------------|------------|
| 1) under 25 | 2) 25-34 |
| 3) 35-44 | 4) 45-54 |
| 5) 55-64 | 6) over 65 |

12) What is your highest level of education?

- | |
|-----------------------------------|
| 1) High School |
| 2) Some/completed post- secondary |
| 3) University degree |

13) In what area do you live?

Postal Code: _____

14) What is your household income?

- | | |
|--------------------|--------------------|
| 1) under \$30,000 | 2) \$30,000-39,999 |
| 3) \$40,000-49,999 | 4) \$50,000-59,999 |
| 5) \$60,000-69,999 | 6) Over \$70,000 |

15) Where did you pick up your copy of the paper?

16) What would you like to see more of in the paper?

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☐ No, don't send me a subscription

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in St. Catharines and the Centre for Advanced Manufacturing with facilities in Cambridge and Peterborough will be put on the block.

Winston would not comment on whether any private-sector buyers are interested in the centres, none of which turn a profit. However, he said his ministry "expects they can be profitable."

He said the Ministry of Industry, Trade and Technology plans to continue operating its Centre for Resource Industry Technology in Sudbury, while the Centre for Farm Machinery and Food Processing Technology in Chatham will be turned over to the provincial Ministry of Agriculture and Food.

INFOMART ONLINE, Toronto on-line database operator, has added The Canadian Press news wire to its retrieval service, which already offers an assortment of Canadian and U.S. daily and weekly newspapers.

NCR CANADA PRESIDENT BOOSTS FREE TRADE WATERLOO, Ont. (NB) — NCR Canada Ltd. "fully supports and has a vital interest in the creation of an international marketplace based on open markets without borders, tariffs or other restrictions," according to Donald J. Albers, president of NCR's Canadian subsidiary, based in Mississauga, Ont.

Speaking to an international group of economics and commerce students in Waterloo, Albers backed the idea of a free-trade agreement between Canada and the U.S. — an idea which has attracted support from the business community in Canada, near-hysterical opposition from a sizeable part of the Canadian population, and virtually no attention in the U.S.

"Setting aside fears about social or political domination, the real issue is how should Canadian firms do business to compete effectively in the U.S. and around the world," Albers said. "Effective competition is certainly what we must be sensitive to, and continually strive for."

Albers joins IBM Canada President John Thompson and heads of several high-tech industry associations here in his support for the agreement. CONTACT: NCR CANADA LTD., 6865 Century Ave., Mississauga, Ont. L5N 2E2, (416) 826-9000

THE VANCOUVER TECHNOLOGY MARKET LETTER will fold unless the business can be restructured soon. Publisher David Roberts told THE FINANCIAL POST recently his 10-month-old newsletter has failed to attract enough subscribers to be viable. He said subscribers will get back 80 per cent of undelivered subscription costs.

DESKTOP PUBLISHING

BRODERBUND, San Rafael, Ca., says it has sold its one millionth copy of The Print Shop. Originally introduced in 1984, the program quickly became a favorite and has remained on SoftSel's Hotlist for 185 weeks.

DTP HELPS CREATE INSTANT BOOK ON CALGARY OLYMPICS

CALGARY (NB) — If you think those downhill skiers and bobsledders are fast, you ought to see the writers and editors at Murray Love Productions.

One writer and 70 photographers working for the Vancouver-based publisher covered the progress of the Olympic Torch across Canada. Along with a team of editors and artists back in Vancouver, they're producing a 224-page book entitled "Share the Flame," to be launched on February 25. What makes this possible is desktop publishing using IBMPS/2 computers and Pagemaker software, plus an IBM PC Convertible on the road. And plenty of coffee, no doubt. CONTACT: MURRAY LOVE PRODUCTIONS, (604) 687-6833

COREL RELEASES DTP TOOLS

OTTAWA (NB) — Corel Systems Corp., a maker of desktop publishing software, has introduced two new text manipulation programs for MS-DOS computers. Corel Headline lets users add, delete or modify text, lines and graphic figures, and provides an assortment of screen patterns. Output is in PostScript format and can be imported into Ventura Publisher or PageMaker. Corel Newfont allows creation of hollow, shadowed, shaded, skewed, angled or stretched versions of standard PostScript fonts. Each of the two packages will sell for C\$250. CONTACT: COREL SYSTEMS CORP., 1600 Carling Ave., Suite 190, Ottawa, Ont. K1Z 7M4, (613) 728-8200

GENERAL

THE COMPUTER PAPER GOES AFTER WEST-COAST MARKET

VANCOUVER (NB) — British Columbia now has its own

monthly publication for the consumer PC market. THE COMPUTER PAPER, a monthly tabloid, will be distributed free. Backers expect an initial circulation of about 30,000. Publisher Kirtan Singh Khalsa says the paper will deal with Canadian payroll programs, locally produced compatibles, the Western Canada software industry and information on local bulletin board systems. Its editorial content also includes portions of NEWSBYTES.

Distribution will be through computer stores, newsstands, bookstores, and by mail to computer-related businesses and individuals, the publishers said.

IMPROVING EYESIGHT WITH PERSONAL COMPUTER

TOKYO (NB) — Is a personal computer display harmful to our eyes? It could be yes. But Tokyo-based software house Copus has challenged this concept by turning the hardware from the ailment to the cure. In order to make a personal computer a tool to improve user's eyesight, the company has developed unique eyesight training software called Mieta-kun. The software displays eye training rings on the screen while the "patient" keeps watching them from the distance using a special long cable connected to the keyboard.

Copus has applied theory of training eyesight, staring at stars and distant landscapes. Copus is planning to export the software in the future. If you believe it, buy and try using the software. The software is priced at 24,800 yen or \$190.80. And its extended cable costs about 10,000 yen or \$76.90.

FLOPPY DISKS FOR THE BLIND

COLORADO SPRINGS, Co. (NB) — For the first time, a manufacturer of disk packaging materials has addressed the needs of the blind computer user. Brown Disc, in association with Dr. Dean Tuttle at the University of Northern Colorado, has designed labels for disks and packaging that enable a blind person to read the contents of the package and the description of the disks in Braille. The special packages of Braille diskettes also come with a label kit with which additional Braille labels can be created.

CONTACT: Lowell Bell, BROWN DISC, 303-593-1015

LOCAL AREA NETWORKS

LANs BOOMING ACROSS THE LAND

PLYMOUTH MEETING, Pa. (NB) — Dollar sales of communication devices grew by 28 percent and unit sales by 24 percent for September-November 1987, according to IMS America. The IMS National Computer Retail Report on sales to computer retailers shows extremely rapid growth in network devices, up 74 percent in dollars and 148 percent in unit sales over the same period in 1986. Modem sales increased 18 percent in dollars and 36 percent in units (modern prices really have been falling). Other devices — mostly micro-to-mainframe gear — grew 15 percent in dollars but fell 33 percent in volume, says IMS America.

NOVELL SYSTEMS, Orem, UT, is beginning to regret ever getting into the business of selling hard disks. A reorganization announced recently could be the first step toward selling the former Santa Clara Systems, says "Infoworld."

CMQ OFFERS ELECTRONIC QUOTE SYSTEM FOR LANs

TORONTO (NB) — CMQ Communications Inc. has introduced MarketLAN, a system that allows PCs on a local-area network to share one connection to CMQ's AutoQuote stock-market data service. AutoQuote provides dynamically updated quotations on more than 75,000 investments on all major North American exchanges. MarketLAN will work with commercial local-area networks, including Ethernet and IBM Token Ring.

The system was developed with LAN Services Inc. of New York, a network vendor. It is to be available in June, according to CMQ. Live access to data offered by Telerate Inc. of New York, which owns CMQ, will be available in the third quarter. CONTACT: Robert J. Bartolotta, CMQ COMMUNICATIONS INC., 55 Yonge St., Suite 1102, Toronto, Ont. M5E 1J4 (416) 365-7171

MACINTOSH NEWS

APPLE LAPTOP SCREEN CHOSEN

CUPERTINO, Ca. (NB) — Apple has selected a technology called "active matrix" LCD for its coming Macintosh laptops, according to MACWEEK magazine. Apple is said to be ready to order 10,000 of the screens each month from Osaka, Japan-based Hosiden Electronics, starting in July. Active matrix technology, currently found in some handheld Japanese television sets, has a transistor at each pixel on screen instead of the conventional method of connecting each pixel via wires to a transistor. The end result is said to be faster, cooler-running, and higher in contrast than cur-

rently available LCDs.

APPLE BUYS QUICKDRAW, PASSES UP DISPLAY POSTSCRIPT

CUPERTINO, Ca. (NB) — Apple has made official its choice of a new screen routine and the winner is Andy Hertzfeld's enhancements to QuickDraw — QuickerDraw. The software is expected to be included in coming versions of the Macintosh and will not be an exclusive Apple property. Hertzfeld says he's also licensing it to Radius Corp., among others. QuickerDraw is supposed to be three times faster at addressing the screen than its forebear. In case you can't wait to get it, QuickerDraw is also going up on bulletin board systems across the country where Andy will give it away free.

APPLE'S UNVEILS UNIX OPERATING SYSTEM

CUPERTINO, Ca. (NB) — Apple Computer has introduced a UNIX operating system for the Macintosh II at Dallas' UniForum convention, an international forum for the Unix community. The new A/UX operating system is expected to be the boost Apple Computer needed to propel it into federal buying circles. UNIX is the most widely used operating system in Washington and Apple has been trying to penetrate the lucrative federal market for over a year.

A/UX can be purchased installed on an 80 megabyte hard disk in a complete Macintosh II ensemble for \$8,600 to \$10,745, depending on options. Or current Macintosh II owners can purchase the operating system with an upgrade "bundle" consisting of an 80 megabyte internal or external Apple Computer hard disk installed with A/UX and PMMU, and 4 megabytes of RAM. That will run slightly less than \$5,000.

And for the first time, Apple has offered a comprehensive support program. Buy the hardware and you get free manual and software updates. Buy an enhanced support contract for \$3,395 a year and get access to a toll-free hot line direct to the UNIX gurus at Apple.

NEXT APPLE INTRODUCTION: CD-ROM

CUPERTINO, Ca. (NB) — Apple is widely expected to introduce its long-awaited CD-ROM (compact disk read only memory) drive on March 4 at the next Microsoft CD-ROM conference in Seattle. Speculation has it that the device will cost about \$1,500. Apple will become the second major computer company to introduce its own brand-name CD-ROM drive provided that Atari, the first firm to offer a CD-ROM drive, keeps its promise of shipping the drive this month, February. No advance word on what programs will initially be offered for the drive, but they are to be announced at the same time as the drive's introduction in Seattle.

VIRUS ATTACKS MAC; HARMLESS "FOR NOW"

SAN FRANCISCO, Ca. (NB) — Between February 6 and 8, some 40 or so people downloaded a file from GENIE and CompuServe described as a discussion of unannounced Apple products. What they got was an unannounced intruder in their system file and the first known "virus" attack on a Macintosh which made headlines around the world.

The virus program, created by MACMAG, a Canadian Macintosh magazine, was designed to hide in a Macintosh system file until March 2 at which time it would emerge and display a message of peace. Then it would erase itself. But its apparently benign purpose was not known until after two days of investigations by the CompuServe user group staff who feared the program, titled NEWAPP.STK, would destroy system files and data. They now report the program is "harmless" but the potential for data destruction was clear.

BRAZIL KILLS ITS OWN MAC CLONE

CUPERTINO, Ca. (NB) — Apple Computer is celebrating a victory in its battle to beat back the only known clone of the Macintosh. The government of Brazil has rejected an application by Sao Paulo, Brazil-based Unitron to market a Macintosh 512K clone in Brazil, on the grounds that it is not original enough to receive government approval.

The sudden concern by the Brazilian government for the issue of originality comes in light of the Reagan Administration's new tariffs against Brazilian imports due to the Brazil's cavalier attitude toward international copyright law.

ASHTON-TATE BUYS ANN ARBOR SOFTWARES

TORRANCE, Ca. (NB) — In a surprise move, Ashton-Tate has moved into the Macintosh market in a big way with the purchase of Ann Arbor Softworks and its Macintosh software including FullWrite Professional, a word processor with built-in desktop publishing features, and the FullPaint graphics package. Ashton-Tate also unveiled two other new products born of the wedding, Full Impact (\$395), a spreadsheet with word processor, report generator, and some desktop publishing features. It will be available on July 31.

dBase Mac RunTime, \$795, allows programmers to distribute dBase applications without buying the full program.

Ashton-Tate's purchase of Ann Arbor Softworks, in the making for months according to sources, could have been worth an estimated \$30 million dollars although no price for the takeover was disclosed.

WORDPERFECT PROMISED BY MARCH 21

OREM, Utah (NB) — People who bought buggy beta versions of WordPerfect at the MacWorld Expo probably won't see the real thing until some time in March, according to the company. WordPerfect charged buyers \$99 for a beta copy of the WordPerfect word processor at the fair, that's one fourth the expected retail price of \$395. In fact this is also the third MacWorld Expo in which the product has been promised.

Some 1,500 have snapped up the offer and are participating in the debugging process. Comments about bugs are being sent to WordPerfect via the phone and electronic mail. Meanwhile, WordPerfect is also planning to up its price to dealers five percent by March 21, the date dealers say they've been promised the first shipments of WordPerfect.

APPLE KICKS OFF BUSINESS FORUMS

MARKHAM, Ont. (NB) — Apple Canada Inc. is wooing Canadian business with a series of "business forums" in five cities this month. Apple says more than 10,000 people are expected to attend the sessions in Toronto, Ottawa, Edmonton, Montreal and Vancouver. The business forums will combine seminars, a product expo, and a software showcase featuring third-party business software for the Macintosh.

Registration for the forums is free. Public sessions are in Toronto on February 16, Ottawa February 19, Montreal February 22 and 23, Edmonton February 25 and 26, and Vancouver February 29 & March 1. CONTACT: APPLE, 1-800-387-9683, ext. 50

APPLE CANADA INC., Markham, Ont., is pleased that the Federal Court of Canada has found several companies and individuals in Vancouver guilty of contempt of court for defying injunctions against selling Apple II clones. O.S. Micro Systems Inc., Comtex Micro Systems Inc. and individuals associated with the two companies pleaded guilty to the charges.

APPLE SEES 30% GROWTH IN '88, POSSIBLE LAPTOP, NEW II IN '89

CUPERTINO, Ca. (NB) — Apple Computer Chairman John Sculley told shareholders that Apple's revenues should grow 30% this year — up 9% over 1987's growth figures — at the firm's annual shareholders meeting. Said Sculley, "We are on our way to becoming the \$5 billion company that we hope to be by 1990." The mood was clearly upbeat as shareholders also approved the appointment of astronaut Sally Ride to Apple's board of directors.

Sculley told the crowd 1988 will be the year of communications, "just as 1987 can be characterized as the year of the CPUs." He said Apple will introduce a host of communications products to link Macintoshes with other computers, a prediction which is already manifested with Apple's introduction of new programming tools for Macintosh network access (see next story).

In a separate meeting with analysts, Sculley mentioned that he would like to see a smaller, lower-priced Macintosh II, but gave no date for such a product. His public relations officers later cleared up the ambiguity by saying a lower-end Macintosh II will not appear until 1989. To Sculley, "low end" means a complete Mac II system for \$6,000 instead of \$7,000 to \$10,000.

Apple isn't talking about rumors of a laptop that could be introduced as early as March. Several sources at MacWorld Expo report seeing a prototype laptop Macintosh with looks similar to the Toshiba T3100 and a high resolution, new technology screen.

APPLE INTRODUCES SOFTWARE TO HELP MACS NETWORK

CUPERTINO, Ca. (NB) — New tools for programmers are aimed at blasting away any remaining barriers between the Macintosh and the IBM world. Apple Computer has introduced MacWorkStation, software which allows Macintosh features, such as pull-down menus, icons, and windows, to be a universal interface for all computers on a network. Also introduced was a product called MacAPPC, another tool to connect Macs with IBMs. Apple's Sculley has called 1988, "the year of communications," indicating these are only the tip of the iceberg of products Apple will introduce for communications and networking this year.

THE STOCK MARKET

HEWLETT PACKARD'S SHINING FISCAL QUARTER

PALO ALTO, Ca. (NB) — Hewlett Packard continues to stun Wall Street with incredibly good earnings. In its last financial statement, the firm claims to have seen profit jump 54% to \$179 million, compared to this time last year. Sales amounted to \$2.2 billion. HP's chief executive says orders are up 26% compared to 1987 and are the "highest for any quarter in history." Analysts are fond of using HP as a thermometer for the general health of the computer industry. Consequently this latest report prompted one to proclaim "the industry is in good shape."

COMPAQ, Houston, credits retail dealers with getting it over the \$1.2 billion sales mark, and announced improvements to its Salespaq dealer support program. New parts and Yellow Pages ad programs are among the big enhancements.

UNISYS CORP. of Blue Bell, Pa., expects double-digit growth in profits this year, according to Chairman W. Michael Blumenthal. Blumenthal told analysts he expects revenue of between \$15 billion and \$17 billion by the early 1990s. Last year, the company earned \$578 million (\$3.13 per share) on \$9.7 billion in sales.

BCE INC., Montreal-based parent of Bell Canada, Northern Telecom and several other companies, has acquired nearly 600,000 shares of Memotec Data Inc., also of Montreal, giving it 29 per cent of Memotec in all. Memotec in turn owns Teleglobe Canada, which provides overseas satellite communications.

LINEAR TECHNOLOGY INC., an integrated circuit manufacturer based in Burlington, Ont., made a profit of C\$2.7 million in the year ended Dec. 31, up from C\$1.7 million in the previous year. Revenues rose, too — from C\$12.4 million to C\$17.2 million.

COMPUTER INNOVATIONS DISTRIBUTION INC., Brampton, Ont.-based operator of all Canadian ComputerLand franchises, made C\$3.1 million in the 40 weeks ended Jan. 2, up from C\$2.1 million in the 39 weeks a year earlier. Revenue climbed to C\$211 million from C\$174.9 million.

LSI LOGIC CORP. OF CANADA, Calgary, reported a profit of C\$3.7 million in the year

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ended Dec. 31, up from C\$2.1 million the year before. Revenues rose to C\$23.2 million from C\$14.6 million.

MEMOTEC DATA INC., Montreal, has got nearly all the common shares and more than half the preferred shares of Toronto-based service bureau Polycom Systems Ltd. under its purchase offer. Polycom will become a Memotec subsidiary.

LOTUS POSTS RECORD PROFITS, ENHANCES MANUSCRIPT

CAMBRIDGE, Mass. (NB) — Bouyed by continuing strong sales of its 1-2-3 spreadsheet, Lotus Development Corp. has reported record sales and earnings for the fourth quarter and for the 1987. Sales in the quarter jumped 41 percent to \$115.6 million compared to \$81.8 million in 1986. Profits for the quarter were \$22.9 million (50 cents per share), compared to \$15.6 million (35 cents per share) last year. For the year ended December 31, Lotus posted net income of \$72 million (\$1.58 per share) on sales of \$395.6 million, compared to 1986 figures of \$48.3 million in earnings (\$1.03 per share) on sales of \$282.9 million. Lotus said 1-2-3 sales set successive records in each of the last three quarters of 1987. Analysts believe Lotus sold a million copies of the venerable and endurable spreadsheet during 1987.

Lotus has also upgraded Manuscript, its high-end word processing program, to the point that the program functions as a mid-level desktop publishing program. Manuscript 2.0 supports a greater number of graphic formats, including .DXF (AutoCad and VersaCad), PC Paintbrush, and TIFF, as well as the several graphic files version 1.0 handled. The new version of manuscript also includes macros, downloadable fonts, math functions, and an integrated thesaurus. Available in March, Manuscript will be \$495. Users of 1.0 can upgrade for \$75. Contact 1-800-TRADEUP.

COMMODORE RINGS UP STRONG QUARTER, SHOWS UP IN BUSINESS STORES

WEST CHESTER, Pa. (NB) — Commodore International continued its strong financial comeback, with second quarter earnings of \$20.7 million (65 cents per share) on \$455.6 million in sales, versus profits of \$16 million (50 cents per share) on sales of \$446.8 million. Also, Commodore's Amiga and Amiga 2000 are beginning to show up in retail outlets catering to businesses, indicating that the powerful Amigas may be able to make the same leap to the business world that Apple has recently accomplished. Several Washington-area stores, including Standard Business Systems, a long-time computer retailer, has started giving the Commodore products floor space and customers have been surprised to see how powerful and capable the Amiga is, reports Standard. Commodore Chairman Irving Gould said the Amiga "is being established solidly and currently represents 40 percent of total revenues."

OS/2

MICROSOFT RELEASES OS/2 PRODUCTS

REDMOND, Wa. (NB) — There are now five new languages, dubbed the "first generation," for IBM's OS/2, and two new development kits from Microsoft. In this major update, Microsoft says the languages and utilities released will allow programmers to write for both the new generation of IBMs and MS-DOS applications. The products include the C Optimizing Compiler Version 5.1, BASIC Compiler 6.0, Macro Assembler Version 5.1, FORTRAN Optimizing Compiler 4.1, Pascal Compiler 4.0, OS/2 Programmer's Toolkit and Windows

2.0 Software Developer's Kit.

The OS/2 Programmer's Toolkit is similar to the version put out by Microsoft one year ago. But instead of a \$3,000 price tag, this tool kit carries a \$350 price. "That was for the few of them," says Steve Balmer, Microsoft's vice president for systems software, referring to the pricey version. "This is for everybody."

COMPAQ SHIPS ITS OS/2

NEW YORK (NB) — Compaq began shipping its version of Microsoft's OS/2 for its 80286 and 80386-based machines, at a flashy New York press conference. The folks from the ranch said their version is fully compatible with IBM's OS/2, which first shipped last October. As usual when comparing itself to IBM, Compaq's people said their stuff is faster. "As expected, MS OS/2 delivers better performance on Compaq 80286 and 80386-based personal computers than similarly configured IBM PS/2 products running IBM OS/2 because of the higher system performance of our personal computers," said Compaq president Rod Canion. Canion added the next version of MS OS/2 will include a version of the Presentation Manager, still unreleased by IBM, and Compaq OS/2 users will be able to upgrade to it for a small fee.

CONTACT: Jeff Stives, COMPAQ (713)370-0670

OS/2 DEVELOPMENT ADVANCES WITHOUT PRESENTATION MANAGER

MARIETTA, GA (NB) — ZSoft last week launched the OS/2 version of its Publishers' Paintbrush product. President Mark Zachmann admits the new product is not, by itself, a reason to move to OS/2, but hopes other products will make the switch look like a good move by Comdex this spring. "Within 12 months there will be a lot of applications," he predicted to NEWSBYTES. "Actually, it was quite easy," he added about the conversion process. "It's not nearly as big a deal as people thought. If you write for DOS, and keep the things OS/2 can do, like multitasking, in mind, it is easy." But using the IBM Presentation Manager, due out later this year, the conversion process would be more difficult. The OS/2 version of Publisher's Paintbrush will cost \$285.

CONTACT: Mark Zachmann, ZSOFT, (404)428-0008

QUADRAM, Norcross, is prepared to challenge the Micro Channel patents held by Computer Automation, Irvine, CA, which IBM licensed. Costs of acknowledging the patent, first given in 1973, are \$300,000 to start and \$2.50 per megabyte for all boards sold.

OS/2 FOR NEC PC-9801

TOKYO (NB) — NEC has started selling an application program development kit in OS/2 for NEC's best-selling personal computer the PC-9801. Insiders say more than 100 sets were sold to software houses. The price of this kit is 99,000 yen or \$762. NEC is planning to release the end user version of OS/2 for the PC-9801 in June. The price is expected to be around 60,000 yen or \$462. Meanwhile, Fujitsu will also ship its own version of OS/2 for its computers this summer. The company has extended OS/2 in its own way, making it compatible with various levels of Fujitsu's computers, from mainframes to PCs.

CONTACT: NEC, 1-4-28 Mita, Minato-ku, Tokyo 108

E TU, INTEL? — PS/2 CLONE CHIPS ON THE WAY

SANTA CLARA, Ca. (NB) — Intel Corporation executives briefed several hundred employees on plans to introduce a PS/2 chip set and VGA chip which are fully compat-

ible with IBM's new products recently, according to PC WEEK magazine. The weekly says Intel will announce the chip sets in the second quarter and probably will not begin manufacturing them until late 1988 or early 1989. Intel is in a particularly cozy situation with IBM as it already supplies a majority of the microprocessors and related parts used in IBM machines. Until recently, IBM also owned 20% of the company's stock. The micro industry with PS/2 clones in the wings has been cowering from IBM's legal muscle should they introduce PS/2-compatible products. IBM has publicly declared its intention to pursue all who dare to tread across its Micro Channel Architecture. But Intel's entry into the arena may provide the clone-makers with new confidence since IBM, dependent on Intel's chips, is unlikely to sue its partner. An Intel spokeswoman would not confirm or deny the report but industry insiders tell NEWSBYTES the story is most likely true.

MICROSOFT PREDICTS OS/2 WILL TAKE 3 YEARS TO BLOOM, CHARTS MICRO SALES

REDMOND, Wa. (NB) — Who would be in a better position to track micro sales than the firm which has a monopoly on their operating systems, having sold one to virtually all PC manufacturers? That's right, Microsoft. And the company has finally broken its silence on the subject by saying that PC sales grew 30% last year and will grow another 26% this year to 8.2 million units worldwide.

As for its OS/2 operating system, Microsoft predicts 55% of all IBMs or compatibles sold in 1988 will be models capable of running OS/2 applications. But it will be 1990 or 1991 before the majority of users are actually running OS/2 applications.

PC NEWS

OLD FRIEND GETS FACELIFT: DBASE IV

TORRANCE, Ca. (NB) — Ashton-Tate has introduced a version of its dBASE software which has a new "look and feel" along with some major organ transplants. dBASE IV is said to be faster and simpler to use than its predecessor, can be used in a network, and can run on both MS-DOS machines the OS/2 operating system. Ashton-Tate says it's put all the bells and whistles into this new version — but at least one of them blew the lid off the presentation. The program reportedly crashed during the press conference. But Ashton-Tate promises all the bugs will be eradicated by the time dBASE IV goes on sale — this July.

The product will carry a whopping \$795 price tag, \$100 more than dBASE III Plus. But current owners of a dBASE product can upgrade at a substantial discount.

IBM MAKES PROMISES IN BOCA

BOCA ROTON, FL (NB) — IBM executives offered some glasnost (openness) in a Boca Raton press briefing on the PS/2 line last week, two weeks after unveiling their version of perestroika (restructuring). Promises were made on future introductions. Among them:

*3.5 inch hard disks carrying 100 megabytes of data;

*5.25 inch hard disks with up to 500 megabytes;

*A 2 inch hard drive which could hold 50-60 megabytes, due next year;

*A 5.25 inch optical disk drive, again for sometime next year. No promises were made on an IBM CD-ROM — instead the company demonstrated an IBM system with 4 Sony CD-ROM drives strung together.

*High-resolution graphics (its 8514A card) built right into the motherboard.

CONTINUES ON PAGE 18

Desktop Presentations

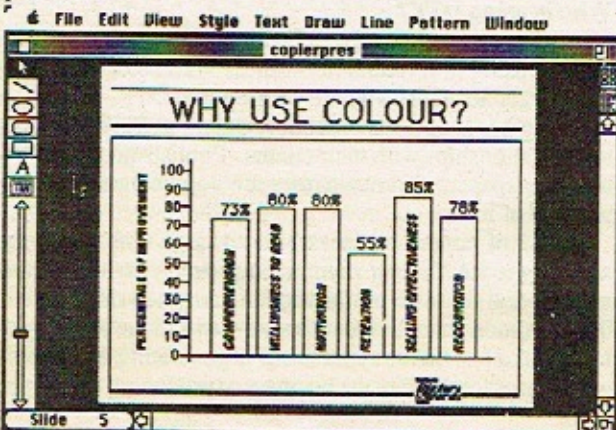
Fast and slick- from computer to overhead projector

Desktop Presentations: The D-Word strikes again

The computer industry loves buzzwords, and one of the most loved is Desktop. Desktop publishing has become a mechanism for selling considerable amounts of hardware, software and printers, with Apple being the chief beneficiary. Of course any selling opportunity doesn't remain unchallenged for long, so now we find the MS-DOS world rushing to establish their systems as being ideal for the office page document needs.

Well, desktop presentations is about to emerge as the next desktop market, with Apple challenging what has been up until now an MS-DOS exclusive.

Many of the tasks done by desktop publishing are not for publication but for use in business presentations. What we will see in the near future is a rapid rise in the abilities of software packages to handle the unique needs of the business presenter.



Microsoft's PowerPoint allows you to rapidly assemble and organize a Desktop Presentation

What is Desktop Presentation?

Getting your points across calls for dealing with these issues.

- Communication
- Communication of knowledge
- Speaker Support
- Control of the Process

Before when you wanted to do any of the above, you had chose either to farm it out or develop your ability to create great graphic presentations with the tools in your desk. Desktop presentation tools give the ability to do a presentation on your own that looks like you had the graphics department do, without taking over all your time. This may seem like a luxury you may not immediately need, but wait until you get a taste of what it can do to keep an audience awake.

Public speaking ranks as one of the high stress areas for most people, so methods of reducing the stress of this task will find ready acceptance in the office.

With this type of system you can integrate your ideas with industry data supported by graphics, changing the composition for each audience or method of presentation such as overheads or slides, along with handouts. The addition of new accessory hardware allows you to even use the computer to be the means of presentation, if you add a LCD data panel to an overhead projector, or even a full colour video projector.

The basic promise for desktop presentation is that it puts you in charge of presenting, which is the way it should be in any case.

Planning: You may hate it but you'll hate flopping more!

In planning your presentation you must identify the key points that you want your audience to remember. Describing the topic will be the next area of focus, as not all the audience will be as familiar with it as you are. This is the time for general explanation. You now need to add supporting evidence, to make your points believable by the audience. In each stage the graphic control that desktop presentations can give will aid the presentation.

Producing: If the presentation looks good, so will you.

As very few of us do this type of thing everyday it is well advised to consult a style guide to get some tips on how to give a presentation. The 3M guide "How to run better business meetings" is a good primer.

Coming up with a consistent look & feel to your visuals will make everything seem more connected and will reinforce the professional image you hope to gain by using desktop presentation.

The medium is something that has to be considered as

you build the presentation, because what you say will be affected by how you can say it. If you are giving a presentation with 35mm slides then you should decide that at the same time as building your look and feel. Sometimes content has to be modified to fit the medium, but if you find that happening too often perhaps the medium should be reviewed.

The process: How do we get it done?

Must be quick, Must have handouts!

These are two things that the average business presenter will demand. Quick because enough time is rarely allotted, and the attendees of the presentation will retain more from the presentation with printed materials to jog memories later, or explain the details.

The users need an easy way to create what they are looking for in materials, and it is this aspect of presentation graphics that the software companies are addressing. It is now possible to create a very acceptable text based presentation in under 30 minutes.

The newest angle to be worked with software is the ability to take your files and send them to a service for slide processing or touch-up.

All of these developments are designed to make it easy enough to justify using even for impromptu meetings while having the power to handle the important, pull out all the stops meetings.

What is available?

The new products that are coming to your computer dealer will include software designed to quickly generate graphics and text in the formats that you will need if you are going to produce slides or overheads.

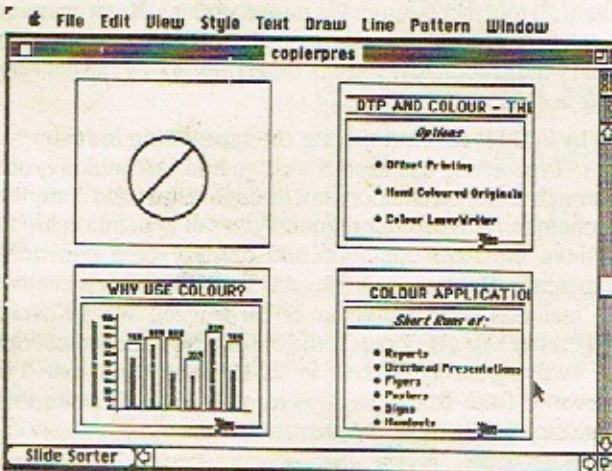
The hardware platforms are designed to combine graphic power with text manipulation. Up until this year if you wanted colour in your images you were better off with MS-DOS based systems, but with the addition of the Macintosh II, you benefit from the competition. The advances in the Mac arena in regards to colour output, quality, as well as ease of use means presenters have never had it so good.

The accessory devices such as printers and film recorders are dropping in price without sacrificing quality, to a point where in-house purchase is a reasonable option.

The reality of this now is that a manager can produce overhead transparencies, slides or handout materials, go through the inevitable revisions, and get exactly what is needed in a matter of days, where it used to be measured in weeks. That type of control is necessary in today's business climate, and its time has come.

Why do you need Desktop Presentations?

Simply put, when you give a presentation you need to have control, preferably with flexibility. Anything that saves time is valuable to most people and even better when it comes along with saving money. Desktop presentation isn't a magic cure for all the problems involved in arranging a presentation, but puts you in control of a situation that can easily take control of you.



PowerPoint allows you to preview your slides before printing or display.

Bruce Wright is President of Business, Pictures & Words a Vancouver company specializing in Desktop Presentations 688-5468

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The Computer Paper Interview: Daken Ariel

Daken Ariel is President of Coast Computers a Vancouver company specializing in Desktop Publishing hardware and software. He talks here about the basics of Desktop Publishing and how it can benefit your business.

Interview by Kiran Singh Khalsa

How to Profit from Desktop Publishing

Desktop Publishing - the hottest buzz word in the computer industry. What is it and how can we profit by it?

What is Desktop Publishing?

Desktop Publishing (DTP) is the natural evolution beyond word-processing. You might call it an emerging standard in the high quality preparation of the written word on a computer. The advanced software programs that allows this represents the merging of several disciplines: typography, page layout design, copy editing and publishing skills (when the document is to be reproduced by a traditional typesetter).

The trends in typesetting, printing and publishing demonstrate the power of an idea; in this case the use of low cost micros in businesses to produce as much of their own publications in-house, thereby bypassing the traditional consultants and service bureaus. At the same time, this approach has created new entrepreneurial opportunities. Not only are the skills needed to use DTP successfully complex, they derive from different disciplines. They demand both creative and technical proficiency.

Many businesses are turning to small DTP service companies to cut costs in publications without having master DTP in-house.

To participate successfully in this emerging profession, if I might call it one, you need to be versatile.

What are the advantages of Desktop Publishing?

They are many: cost savings, quality control, improved control, flexibility and time savings. The savings can be measured in saving either time, hassle or expense. The benefits are that quality can be improved if the user is properly trained and has the aptitude for layout.

DTP is also raising the standards for business communications. It is rapidly becoming the expected minimum in all manner of publications. Newsletters, price lists, reports, which were once acceptable in type-written format are now expected to have the added "snap" of that DTP provides like: proportionately spaced letters, near typeset quality type and an easy integration of graphics and logos.

What skills are needed?

The user should have basic computer skills. Word processing is still used for text preparation, but no formatting is done in the word processor. If one had a basic word processor under their belt they would have a good start on DTP.

Graphics/Page layout skills will be required. The level of this skill will vary according to the program. Ventura Publisher has style sheets in the software so as to make page layout easier.

Being familiar with terminology in the printing industry will also help. When someone asks about kerning pairs and leading, you won't be too distressed.

What is the hardware and software involved in DTP systems?

The key ingredients in DTP is the publishing software, the microcomputer hardware to run this software and the printers used as various output devices.

The major camps have been divided into the Macintosh hardware/software and the IBM (and compatibles) hardware/software. Businesses will tend to migrate towards the IBM approach due to the familiarity and available equipment. Services centres have been using both hardware environments so as to better service their clients needs.

Whether one chooses to operate on the Mac or the IBM systems, laser printers are the key aspect in DTP. These vary widely as to their capability and price.

How do you evaluate laser printers?

The two camps in laser printer are those with page description languages and those without. As the only page description language that is prevalent at present is PostScript, the camps can be differentiated as PostScript lasers and non-PostScript laser printers. The differences are dramatic and the cost of having the Postscript language can also be dramatic.

Postscript Lasers are the standard in DTP. The reason why this is so is quite obvious when you compare their capabilities to the fixed font Lasers like the HP Laserjet Plus. A PostScript laser printer will print any font size of the thirty five resident in the laser printer's memory because the font is actually scaled from mathematical coordinates. The fixed font laser printers require a specific bit mapped image of a font to be downloaded to print it. With their severe memory limitations only so many fixed fonts can be resident at one time. So for complete flexibility PostScript lasers are the premium choice and expense.

Whatever your printer you will be required to maintain a working knowledge of your laser printer to get the most out of it. Operating expenses can vary widely as well. Some of the low cost printers are notorious for their expense in running them.

What about Monitors?

Large screen monitors have also become essential to the serious DTP user. The ability to view the whole page or a two page spread has become increasingly important for productivity and speed. The Laserview and the Genius are considered the best in their class. I always recommend that you stay away from interlaced monitors as they increase the eye strain with their flicker.

What about Image Scanners?

Scanners vary widely in price and performance. One thing is certain. Continuous-tone images such as photographs are not publication quality at 300 X 300 dots. Line art, such as cartoon drawings, are acceptable through. I recommend to my clients that they consider several important scanning software aspects: File conversion capabilities between the different graphic formats and file compression techniques. The proliferation of graphic software has created multiple file formats. Each, of course, being incompatible with each other. DTP is the great integrator as it ties them all together through its import options. But it is useful to be able to convert in the scanning software as well. You also want to compress some of these files as they can get very big in size.

Why is DTP revolutionizing the typesetting industry?

Typesetting has been a well guarded technology; not through secret incantations but through obtuse and complex technique. A typesetter required years of apprenticeship to fathom the finer operation and mastery of a particular typesetter. Because each company had a monetary incentive to maintain their equipment as an isolated system every typesetter was a different kettle of fish. Now that PostScript is evolving as a standard in DTP, we foresee that this pressure from below, as it were, will begin to make this industry a little more coherent.

Why is PostScript so critical?

PostScript, a page description language, is a means by which what comes out of the laser printer is exactly the same as what comes out of the typesetter (except for the quality of resolution of course). In effect it is a program that is device independent. The program allows both a laser printer and a typesetter to interpret the signals from the computer in exactly the same manner. This is the key to DTP, as it allows everything but the final typesetting to remain in-house,

whether you are a small manufacturer putting a pricing catalogue together or a major publisher about to print another book or manual.

Who is using DTP?

DTP is being used by virtually everyone. The typesetters are using it to maintain business volumes and to keep their larger accounts who are shifting into DTP. Designers are using it to keep costs of production low and to forge long-term relationships with their clients. Publishers of newsletters, newspapers and magazines are beginning to take advantage of it.

And of course businesses, both large and small, are adopting it for its cost savings, improved control and fast turn-around times in producing manuals, newsletters...etc. The common thread is that this new technique along with technical advances in typesetting is generating undeniable advantages for those in the business of producing the written word.

The interesting areas that are emerging are the many cottage industry companies that are popping up. Many of our clients work at home with their DTP equipment specializing in a DTP niche with a few key clients. Others are developing burgeoning service bureau activities by offering laser printing services for businesses.

The Quick Print companies are moving into DTP as a means of adding glamour to their reproduction services by providing a complete design service.

Large corporations are getting heavily into DTP for forms, in-house publications, technical documentation and improved corporate communications. We have had interest from financial institutions, consultants and accounting firms. Recently one of our salesmen spoke at the CGA convention on DTP applications.

Where are the jobs being created?

All over. We think DTP will be a standard resume item in the future. Night courses are getting very popular.

What are the costs of production in DTP?

The costs of production in DTP come from several avenues. These include the cost of acquiring the hardware, software and printer, the costs of insuring the DTP equipment and the service contract required to protect the hardware investment from breakdown, the costs of training involved in establishing a level of proficiency in using DTP, and the actual costs associated with the method of production.

If the final output is acceptable at 300 by 300 dots per inch (dpi) then the costs of production include the laser paper and the incremental costs of the toner. If the final output needs to be above this resolution the costs of typesetting and the management time associated with dealing with the typesetter should be factored into the final cost.

It is accepted that the DTP solution is cheaper than the traditional unless you are doing only casual work. Even if this were the case, DTP should be taken advantage of via the DTP service bureaus. They are very cost-effective.

The Vancouver Electronic Publishers Association is publishing a guide to DTP services in Vancouver. It should be out in the spring.

Any last advice to the DTP newcomer?

Buy from a knowledgeable vendor! You can't over-value telephone support when you need to know some aspect now...



To Desktop Publish or Not to Desktop Publish...

Traditional Typesetting vs. DTP

Desktop publishing, or electronic publishing (as it is sometimes called) is here to stay. Now the dilemma is when to use electronic typesetting and when to stay with traditional typesetting. The definition of electronic typesetting employed here is: using a personal computer and page layout software to manipulate text and graphics. Traditional typesetting refers to the dedicated photo typesetting system used for most high resolution type output.

Below is a very approximate cost estimated for a basic unit in both environments to demonstrate the cost of production and the initial capital outlay of purchasing a system. A list the "pros" and "cons" of each method of typesetting is also provided to aid in making a decision on buying typesetting services from either technology. Remembering in these lists that traditional typesetting is also making rapid advances into the realms of DTP. Many so-called traditional systems (and for that matter traditional typesetters) now employ WYSIWIG (What You See Is What You Get) displays, can interface with computer generated text files and can add in computer generated graphics.

DESKTOP PUBLISHING

\$10,000 - \$25,000 (not including software)

PROS

- Quick turnaround time
- Cost savings
- Document quality to remain constant
- Microcomputer documents are seen "on screen" and are not based on cryptic or obscure codes
- Layout seen on screen and changes made on computer
- Quick changes possible with no re-typesetting of document
- Microcomputer can also mix text and certain types of graphics without paste-up.
- Computer-generated document revisions are instant and reflow automatically
- Eliminates paste-up on many types of documents
- Possible to create logos and then rapidly create variations on them
- Resize or reshape graphic if necessary
- Client files can be kept on disk and easily revised or reprinted later without re-keyboarding

CONS

- Four colour separations are more difficult
- Less fine control over spacing and lines
- Limited to output of laser printer (most are 300 dots per square inch (dpi) although up to 2400 dpi is available, though considerably more costly)
- Quality expectations can sometimes be lower because as with any new field, an influx of new people have entered and some may lack design training and experience.

TRADITIONAL TYPESETTING

\$20,000-\$80,000 (not including typefaces)

PROS

- Accuracy
- Finer control over typeset characters
- Better resolution of type comes from traditional typesetting (1200 and up dpi vs the majority of desktop publishers are producing at 300 dpi)
- Ability to create full page bleeds (most 300 dpi printers print 1/4" borders)
- Characters are photo typeset, and can also be output on film (not possible on 300 dpi printers)
- Stringent placement control in final document
- Precise four colour separations of document
- Quality expectations can sometimes be higher

CONS

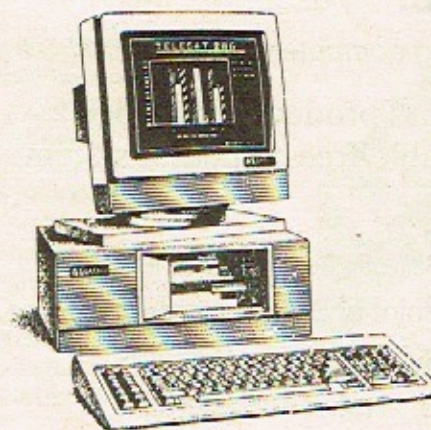
- Screen does not represent document
- Changes are more expensive
- All graphics are pasted by hand
- Dependence on pasteup services

What to do

The decision to utilize or buy a desktop publishing system or a traditional typesetting system is very case specific and depends greatly on the document to be produced. Desktop publishing is able to offer more flexibility, speed, and instant re-flowing of text should there be changes or deletions since everything is screen displayed. However, the traditional typesetter may also offer increased resolution that is an integral part of the creation of your document. The level of experience of the person using either system can often be the deciding factor. One fast lady on an old Varitype phototypesetter blasting away at 100 words per minute on a machine that she has worked on for years, can sometimes be preferable to an inexperienced high tech wizard running all the latest software.

The decision to use desktop publishing or to choose traditional printing methods remains with the consumer. This dilemma will continue until both the output ability and software capabilities for desktop publishing reaches the fine quality of photo typesetting at a lower cost. The best way to decide may be to take your specific job to both a traditional typesetter and a desktop publisher, and get a quote. Or if you are planning to purchase a system, talk to representatives of both kinds of vendors to see which best meets your needs.

Zoey Brown is the owner of Lasting Impressions Communications, a North Vancouver firm specializing in producing manuals and documentation. She utilizes DTP in her work. Telephone 987-4875.



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The Need for Training in Desktop Publishing

Teaching the Technology of Desktop Publishing

Today, the challenge confronting the professional computer trainer is to empathize with the frustration of the student and to remove any obstacles which stand in the way of full control over the technology. When people give up on frustration, should we blame the hardware, the student or the instruction?

The Third Wave

Alvin Toffler predicted that in a Third Wave economy, we will need even larger numbers of trainers and retrainers and that there will therefore be a great demand for the interpersonal skills, and the skills associated with the visual, graphic and dramatic arts. Nothing could be truer... especially in the rapidly expanding area of desktop publishing training.

With the current trend toward automation, particularly with regards to the newest technologies such as desktop publishing, this enormous demand for training is being felt. Modern technology is in constant flux and business will forever be adjusting to this rapid rate of change. Training from professionals provide the basis for a faster adjustment period, a steeper learning curve, and more efficient use of costly equipment and staff time.

Technophobia

For more than a decade, those in the business of teaching others how to use computer hardware have often been confronted with technophobia. Now computer literate individuals are experiencing a new kind of fear - and with reason. An entirely new set of skills must be acquired in addition to mastering today's sophisticated page layout software. There are few experiences more frustrating than having a seemingly magical array of computerized design tools before you and yet discovering you blew it when the printout emerges from the laser printer. The sensibilities required to be a good designer are not yet available for sale in your neighborhood computer shop. In desktop publishing, both information and imagination are crucial. What can an instructor do when one of these components is in short supply?

A large part of the solution lies in the method of instruction employed. In every teaching situation, the onus lies on the instructor to decide upon the direction that the student will take...

Creative Aspects

It is possible to show someone how to embrace the creative aspects of the computer when that person sees it only as a tool and not as an extension of personal creativity and imagination? In the case of desktop publishing, is it more constructive to turn people on to typography and page layout or the novelty of pull-down menus and the joy of hierarchical disk storage structures? Again a good instructor will be able to quickly gauge the abilities and interests of an individual and tailor the instruction accordingly. For some students, a playful approach to using a particular application on the computer will provide the best incentive to really get mileage out of the technology.

In the case of a typesetting professional or graphic designer learning to use a micro computer to perform desktop publishing tasks, an instructor must tailor the teaching to allow the student to become comfortable with the unfamiliar technology, while illustrating the difference between the old and new systems. Emphasis need not be placed upon the design aspects of DTP. In the case of a student already comfortable with the equipment, but weak in design, emphasis must be placed up on the elements of page layout and typographic conventions.

The Message

Mashall McLuhan told us that "the medium is the message." Independent of its content, a document is less likely to be read and taken seriously if it is poorly presented. To assist individuals in producing documents that are attractive and well designed, there are numerous books which focus on the design aspects of the new technology. There are also a number of magazines focussing on this burgeoning field. Two of the best of these are *Publish!* and *Personal Publishing*. They approach the field from the perspective of people with no background in typography and design but who are working with the new DTP systems.

As with any other complex system, a solid foundation is required for an effective learning process.

The most difficult case for the instructor of any modern page layout program is the individual who is unable to grasp even word processing due to a less than solid command of the written language. Without an ability to manipulate spoken and written language, a student has no framework upon which to build either computer or graphic design skills.

The True Value of Instruction

What is the true value of professional computer instruction? Can business and industry do without it? Clearly if they had to, they could. Most software today comes with a tutorial (some better than others), a manual and a variety of on-line screen help utilities. But obviously that's not enough. Walk into any computer book store and you can see ten different supplementary volumes on the popular software packages. Why? Because the manual often does not address the needs of the new user. One of the most important tasks facing the professional instructor is to help the student overcome bottlenecks and to get past common stumbling blocks. Particularly if there is an important job to turn out on the new software, a new user could spend weeks working around a certain problem; the professional instructor has been through the same experience and can provide the solution instantly. This smoothing process is a crucial component of any computer instruction.

Finally, the professional computer instruction will permit the user to avoid working with canned tutorials and the dummy files favored by software publishing houses and get on with direct application of the software to the actual work. Also, people tend to learn much more quickly if they are working with something familiar; something "real" that they can get a handle on. In business, time is money. An investment in computer instruction permits a business to accelerate the learning curve, thus raising the productivity sooner and allowing the firm to get on with the activities that generate the profits that are its *raison d'être*.

Mary Jane Devine is President of the Desktop Publishing Training Centre.



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The Battle of the Page Continues: Xpress 2.0 and Pagemaker 3.0

QUARK AND ALDUS ANNOUNCE NEW VERSIONS

Okay, so this is just another piece on the battle of the page layout programmes, well two of them anyway. There is however some validity in continued pursuit of which is the best page layout application to purchase, as the industry of desktop productions multiplies exponentially every year.

And with this bursting of business comes the obvious need for enhancements tools, if you will through which those just entering the competitive fray can attempt to gain that necessary edge. Owners of the code, which eases from the mortal circuitry of their underlings, clasp their palms together, rubbing lustily at the profits they will make. "But," you ask, "Do we really need all these features?!" Of course we do!

Both Quark, Inc. and Aldus Corporation have announced major innovations in releases planned for shipment in March 1988. Although final product is somewhat scarce on which to test these new features out firsthand, much has already been written about each. Here is a summary of the newest features and enhancements of both Xpress* 2.0 from Quark, and Aldus' PageMaker 3.0. Each have added some major revisions, and rectified some of their past shortcomings.



Aldus PageMaker 3.0

Slated for release sometime this quarter PageMaker 3.0 offers automatic pouring of text over multiple pages and/or columns, automatic wrapping of text around graphics, style sheet formatting (or importing from Word 3.01), spot colour overlays and an improved, more convenient user interface. (Finally, an alphabetically arrange, pull-down font menu!) And if that's not enough, it offers magic resizing settings for matching bit-map and TIFF images to different output device resolutions, the ability to export text files to word processing programmes. Both the MS-DOS and Mac versions come with 20 page templates and can adjust the gray scale images stored in TIFF images allowing limited image editing without the need for a yet another programme.

In addition to its already inherent ability to import and export a variety of text and graphics files through the use of filters, PageMaker 3.0 allows the user to add custom import and export filters from third-party vendors.

PageMaker 3.0 requires one megabyte of RAM and a hard drive. Though the application itself should easily fit on a single disk, expect to find six to fifteen disks in the box, depending on whether you're buying for a Macintosh or MS-DOS machine. Expect the retail price to be higher as well, by at least \$100 in Canada.

Colour is introduced in PageMaker 3.0 with spot colours, colour screens, coloured text supported in three modes: CYMK (Cyan Magenta, Yellow and Black. All the colours necessary to reproduce any other colour), RGB (Red, Green and Blue), and HLS (Hues, Lightness and Saturations). Colours can be mixed to form a colour style you can then apply to a page and print to make negatives or plates for each of the named colours.

PageMaker 3.0 supports two types of automatic leading: proportional (character ascender to descender) with control over designating the percentage of font size for desired leading, and top-of caps to top-of caps leading. Letter-spacing can be adjusted globally, with specifiable minimum and maximums.

Although Aldus has added many new features, the programme still does not contain all the features found in current, competing programmes, but then Aldus does not claim to be a graphics editing tool, or a word processor, but more an a tool for assembling all the necessary elements of the finished page.

Before rushing out and buying PageMaker over its rivals, consider that you will also need a word processor (for long -document text input), at least. Weigh the cost and useful features of these two programmes against the other offerings.

QUARK XPRESS

Since its inception, Quark Inc.'s Xpress has had many of PageMaker 3.0's newest features in addition to its own unique features, and has kept an admirable pace against its giant competitor. To many of us it is THE layout programme

for desktop publishing. Die-hard Aldus Pagemaker* users became so because in the beginning there was only Page-maker, and Aldus has tried to see to it that they stay in the forefront of the marketplace, and admirably so. But the new kid on the block just grew up. With the introduction of Xpress 2.0, a number of previous shortcomings have been addressed.

As an avid user of Xpress I had only one major complaint: An inability to cut copy and paste between pages and/or between documents. This has been addressed in 2.0. As Xpress uses the the parent-child box system, selecting a box includes all the child boxes in that parent, which can then be moved to the clipboard. Previously they could only be deleted.

With its introduction, Quark Xpress offers technology which was previously available only in multi-million dollar systems. Breakthroughs in colour enhancement, display, contrast control, separation ability, scanning and printing.

Xpress has always supported spot colour for text, but now an infinite variety of colours, both RGB and CYMK can be defined and applied to characters, lines, frames and box backgrounds. Or black and white, or gray TIFF pictures, and pictures imported from MacPaint. A colour can also be selected to match specific a value in the PANATONE colour system, or to mix their own, custom colours. (For the uninitiated, PMS, or PANATONE MATCHING SYSTEM is a standard, colour chart/numbering system widely used in the printing/publishing industry.)

Perhaps Xpress 2.0's most unique new feature is its ability to import full-colour TIFF images from colour scanners such as the BARNEYSKAN(and allow the user to define contrast curves for hue-saturation-brightness in both RGB (Red Green, Blue) and CYMK (Cyan, Yellow, Magenta, Black). Colour shading is also possible for each of the colours, from 0-100%, in 1% increments. Xpress 2.0 supports colour printers utilizing the QMS/Mitsubishi G650 thermal transfer print engine.

Borrowing from Pagemaker, Quark has adopted greeking, (a gray line representation of text at smaller sizes) to increase operational speeds. Additionally, printing speeds have been enhanced particularly when using high-resolution output devices.

Unlike PageMaker, Xpress has powerful word processing capabilities, eliminating the need for a large-document, text entry application. An aspect of any word processor is the ability to find/change aspects of the document and Xpress 2.0 is no stranger to these functions. Search for any combination of text and/or text attributes within a story. (ie. font, size, or style). Once found, text strings may be changed to another combination of text attributes.

Quark Xpress 2.0 is compatible with the Macintosh Plus, SE and // and supports a wide variety of third-party text formats including: MacWrite, Microsoft Word 1.05, 3.0, & 3.01, WriteNow and Microsoft Works.

Numerous graphics formats such as TIFF, EPSF, PICT, and bit-map files from most scanners are supported in addition to a large number of application including: Adobe Illustrator, LaserFX, Cricket Draw, Cricket Graph, MacDraw, SuperPaint, Canvas, Mac 3D, Mini-CAD, Pro 3D, MacPaint, FullPaint, and Colour Mac // PICT.

Predicted to be available in March 1988, Xpress is sure to redefine the Macintosh's position in the publishing markets.

All in all, each of the programmes described above even in their current versions have strengths and weaknesses over the other. It's likely they always will, after all, isn't it the nature of competition to sell ones ideas as different? Consider carefully which will be the best for you, particularly if you have either no or little experience with page layout programmes. The biggest disservice you could do yourself is to choose a product based on what other people, or even a salesman, (or reviewer) thinks is best. Pick a project, preferably of a smaller nature, and get yourself down to a dealer or a do-it-yourself service centre and TRY THEM BOTH OUT!

Gordon Field is the owner of Mostly Mac Desktop Productivity Centre in Surrey where he is involved daily with both Macintosh computers and Desktop Publishing.

LINOTYPE

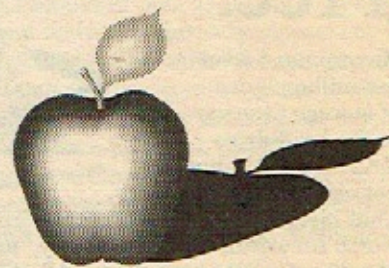
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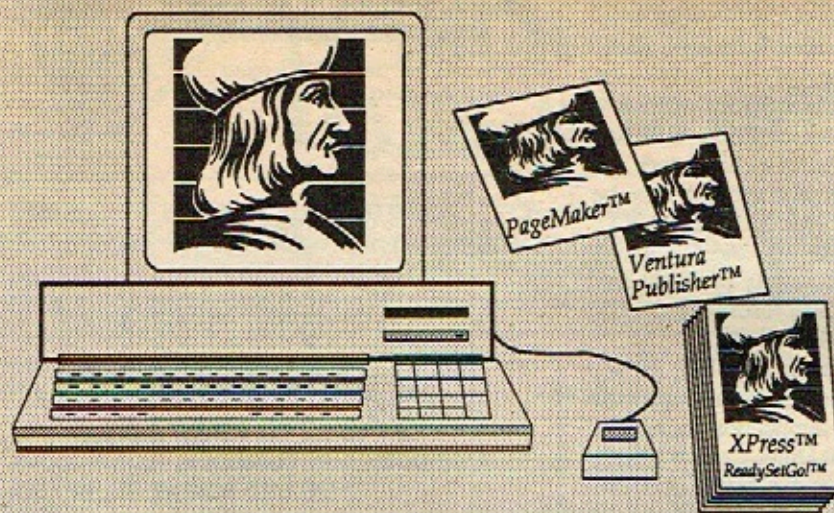
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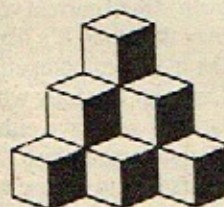
The Desktop Publishing Training Centre is a registered trademark of Logan Design Inc.

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Sytec Pushes DTP to its Limits

Hi-Tech Silk Screening

When you hear the term "silk screen printing" usually the picture of Day-Glo colored T-shirts is the first to come to mind. T-shirts are a far cry from the high tech products which are produced by the local silk screen printing company of SYTEC.

SYTEC specializes in printed circuit switches for the hi-tech industry. Printed circuit switches are those neat little switches on everything from micro wave ovens to stereos, which contribute part of the futuristic feel to modern appliances.

Rapid Growth

SYTEC started by Simon Broomhall out of his basement about 5 years ago, has grown rapidly to a 20 person company serving customers from all over Western Canada. They have utilized state of the art technology to help sustain that growth. In July 1987, they acquired a Macintosh desktop publishing system to help them in their design and layout of these complex circuits. When asked if they felt this had helped in the growth process, the answer from Ken Krug, SYTEC's Art Director, was a qualified yes and no. On the one hand, he felt that it allowed them to sustain their rapid growth without adding an additional two artists. On the other hand they have been overall disappointed with the lack of precision in the current crop of DTP equipment.

DTP Oversold

According to Ken Krug, he felt they had been oversold on the equipment from their retailer. They had been assured that the equipment would meet their specifications for tolerances, which because of the exacting nature of their products can be as small as 1/10,000 of an inch. Unfortunately, the Apple Laserwriter which they purchased can vary as much as 1/16 of an inch on the width dimension. Ken claims the horizontal representation is usually fairly accurate, but the width is often off.

The company spent a few months after the initial purchase trying to pin down what was wrong. In discussion with both the retailer and Apple in California the problem was discovered to be with the Laser printer which is not designed for such precision. The retailer offered to replace the system with another of their choice, but after some research, it was determined that nothing else in the same price range will do the job either. Back at SYTEC, the artists with a job to do have learned to live with this shortcoming and now routinely adjust for the discrepancies.

Real Soon Now

Ken is anxiously awaiting the release of the Macintosh version of VersaCAD, a high end CAD program due out "Real Soon Now". With that he hopes to pair a plotter which will increase his precision to the desired level. Another development which may help his predicament is the eventual adoption of Display PostScript which is predicted for many Macintosh programs. This sends the same information to the screen that goes to the printer, presumably minimizing discrepancies.

The desktop publishing set up has however, given SYTEC considerably more flexibility in working with type. Logos and design work are set at 400% their final size, and then photographically reduced to take the original 300 dots per inch (dpi) resolution up to 1200 dpi.

Custom Fonts

Ken Krug has been Art Director with SYTEC for the past two years. He doesn't get much free time these days, his evenings and weekends are often spent on design work with the new Mac II. He is overall pleased with the computer, enjoying its relatively easy user interface. Ken Krug spent the early 70's in England studying graphic arts and typography. He looks forward to getting a copy of Fontographer to be able to create custom fonts for SYTEC's clients. "On jobs where we do fifty to one hundred thousand switches, it is well worth the effort to develop something unique," he says.

B.C. Hot Area for Electronics

Because of their specialization, SYTEC have only one local competitor. The closest place for manufacturers to get similar products developed is California according to Ken Krug. "B.C. has become a hot area for electronics in the past few years," says Ken. Some of their large customers include Mobile Data and Microtel.

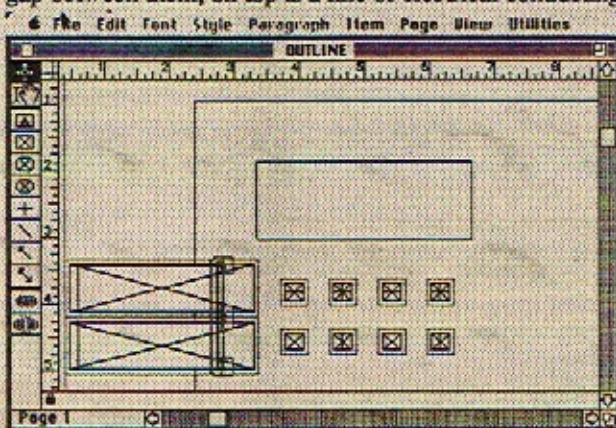
The Payoff

The desktop publishing system which they purchased, although still not ideal, has helped them to manage their

rapid growth. So the next time you push one of those futuristic switches on your new hi-tech toaster, think of Ken at SYTEC, and the "Cinderella of the printing arts" - silk screening.

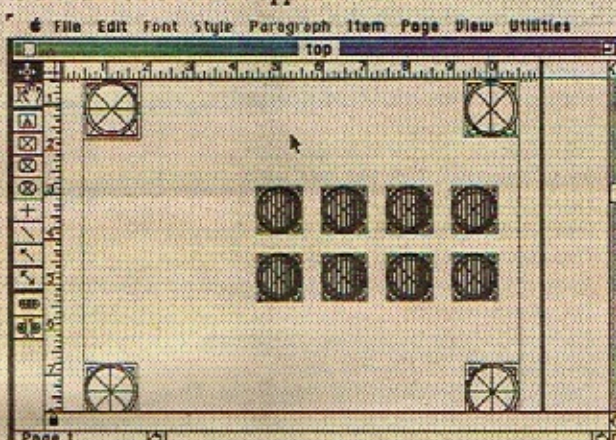
The Making of a Printed Circuit Switch Membrane

A flexible plastic membrane covers two layers of electrical circuits. The bottom layer is two parallel lines with a gap between them, on top is a line of electrical conducting



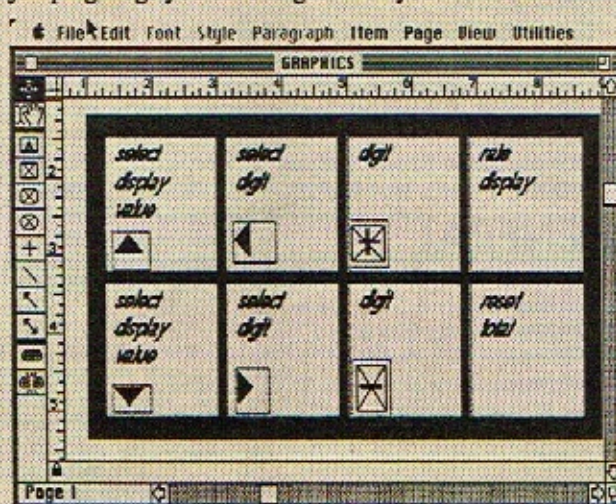
SYTEC uses Xpress extensively in layout: here the outline layer is developed for a switch

ink which runs perpendicular to the bottom lines. When you push the top layer down, there is a connection made and electrical current can run through the ink sending a message to the turn on or off the appliance or device.



The cross lines which short out the connection are drawn here. They will be printed in conductive ink

These type of switches are silent and contains few moving parts. With no electrical switches to break down, the popularity of this approach to switches is on the rise. Because it is silent, manufacturers usually endeavor to provide some feedback to the user as to the effect of his/her efforts. This can either be in the form of an electronically generated auditory "beep", or more commonly by placing a small metal dome within the membrane. The dome gives a tactile feedback and sometimes a little click, like those little metal jumping frogs you used to get when you were a kid.



Finally, the graphic layer for the switches is drawn.

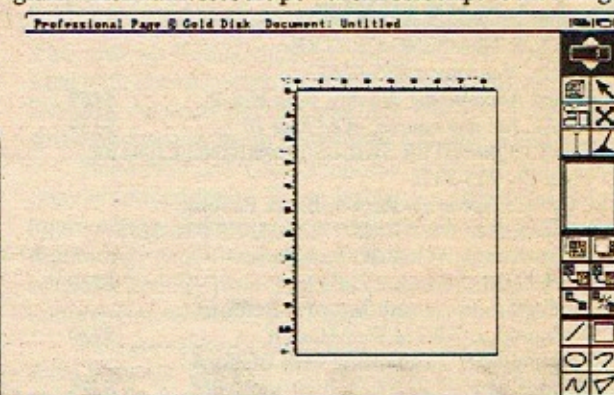
Story by Kirtan Singh Khalsa

SYTEC ENTERPRISES INCORPORATED can be reached at 244 Donaghy Ave. North Van V7P 2L5 988-1125

DTP for the Amiga

PROFESSIONAL PAGE

Gold Disk of Mississauga, Ontario has recently released PROFESSIONAL PAGE a \$500 desktop publishing program which harnesses the power of PostScript to the Amiga.



Access to PostScript

According to the company, the program can be interfaced with existing PostScript compatible printer, including the Apple LaserWriter to produce 300 dots per inch (dpi) resolution and the Linotronic 300 to produce 2400 dpi resolution. It does not however, currently support any dot matrix printers for proofing. This shortcoming will apparently be solved in March when the company plans to release dot matrix printer drivers. The program employs the now familiar menu-mouse-point-and-click interface seen on many similar products for PC and Mac programs. A text box approach as in Xpress or Ready Set Go is employed by the program. Five levels of magnification are available for viewing of the page.

Fonts

The program comes equipped with 4 bit-mapped screen fonts, Times, Helvetica, Courier and Symbol. It can however access the full range of PostScript fonts contained in the ROM of the laser printers. The program does not however display what these will look like on screen. Gold Disk is aware of this short coming and has plans for more screen fonts. The size range of fonts is from 1 point to 127 points. This compares favorably to Pagemaker, however it is exceeded by both Ready Set Go 4 with a 255 point range and Quark Xpress with a 500 point range. Letters can be kerned to 1/100 of an em space both manually or automatically. Line spacing is to 1/1000 of a point.

Text Abilities and Graphics Handling

PROFESSIONAL PAGE will also import files from most major Amiga word processors as well as ASCII text files. The program also feature text run-around of both square and irregular shaped graphics.

Graphics handling seem to be a strong point of both the Amiga and this program. The Amiga employs a standard graphics format (IFF) which most graphics packages support. PROFESSIONAL PAGE allows the user to import and manipulate IFF files. Colour images can be brought in either 256 or 4096 colors, then cropped or scaled to fit the position. With a separate color separation module, images can be separated into 4 color printing plates.

Screen Flicker

PROFESSIONAL PAGE suffers a problem common to a number of Amiga programs. The program runs in a hi-res mode and as such it can produce a noticeable and quite annoying screen flicker. This flicker can be reduced by adjusting the screen colors or with external screens which sell in the \$25 range.

Is it worth it?

Although one program does not make a desktop publishing computer, PROFESSIONAL PAGE does bring the power of PostScript and a breadth of features to the Amiga owner. It is doubtful whether the serious desktop publisher would purchase an Amiga at this point solely for its DTP features, however if it is to be used in conjunction with another of the Amiga's strengths such as music or Desktop Video, then it may be worth considering. (More packages with PostScript are scheduled for release in the near future including one called Publishing Partner Professional.) The Commodore Amiga after all provides a colour system with complete multi-tasking and IBM-PC compatibility for roughly half the price of a colour Mac.

Dave Allen is the former head of the local Amiga user group. He also offers computer consulting services. He can be contacted at 270-0064

Computer Calendar

ACCOUNTING

DOPPLER'S TRAINING CENTRE	
101 W. 5th, Vancouver 875-0261,	
Bedford Accounting full day, Wed Mar 9	\$159
ACCPAC full day course, Wed Mar 16	\$159
PRECEPT COMPUTER SKILLS LEARNING CENTRE	
735 Clark Dr, 255-3198	
ACCPAC: Accounts Receivable & Payable	
8 sessions, Mar 1/3/8/10/15/17/22/24, 7-9 PM, \$275	
Introduction to ACCPAC 3 sessions,	
Mar 14/21/28, 7-9 PM, 255-3198	\$130
Introduction to Accounting with Bedford	
3 Wednesdays, 7-9 PM Wed Mar 16	\$130
Microcomputer Accounting with Bedford	
4 sessions, Mar 21,22,24,25, 8:30-12:30 PM	\$275
PRIMA TRAINING CENTRE	
207-3900 E Hastings, Burnaby, 294-4567	
ACCPAC: Order Entry/Inventory Control	
3 weeks, 1-5 PM, Wed Mar 16	\$150
TXL MANAGEMENT SYSTEMS,	
Hotel Georgia, Timothy Suen 876-7117, 9-12 AM	
NewViews Accounting Tue Mar 15	Free
VANCOUVER COMMUNITY COLLEGE, LANGARA	
875-8200 Room A216	
Accounting Using Bedford	
7-10 PM, 5 weeks, Tue Mar 29	\$150

DATABASE

ADVANTAGE COMPUTERS 4324 Kingsway, Burnaby 430-3113 (Paolo Bertoia)	
call for March Schedule on Macintosh Database courses	
COMPUTER STATION	
2130 Burrard St, Vancouver, Pat Austin 732-8621	
Intro to dBase III+, 1 Day Thu Mar 10	\$175
Intermediate dBase III Plus Wed Mar 16	\$175
Intro to dBase III Plus Thu Mar 31	\$175
DOPPLER'S TRAINING CENTRE	
101 W. 5th, Vancouver 875-0261	
dBase III+ 1 Day course, Tue Mar 8	\$159
FIALA, BONNER & ASSOCIATES	
810-1112 W Pender St, Vancouver, 684-1022	
dBASE III+ 1 Day course Wed Mar 23	\$175
PBSC TRAINING CENTRE	
1350-1140 W Pender St Sue Threlfall 732-1211	
Introduction to dBase III+	
9-5 PM, Sat Mar 5	\$165
PRECEPT COMPUTER LEARNING CENTRE	
735 Clark Dr, Vancouver, 255-3198	
Using dBASE III+: Module One	
2 sessions, Mar 3-4, 8:30 - 12:30 PM,	\$140
Using dBASE III+: Module Two	
2 sessions, Mar 14-15, 8:30 - 12:30 PM	\$140
PRIMA TRAINING CENTRE	
207-3900 E Hastings, Burnaby, 294-4567	
Database Using Clipper	
1-5 PM, 3 weeks, Thu Mar 17	\$150
How to Design a Relational Database	
7-10 PM, 2 weeks Mon Mar 21	\$75
UBC 222-5222	
dBase III+: Intermediate	
7-9:30 PM, 4 Weds in March, Wed Mar 9 UBC Microcom-	
puter Lab, Old Bookstore	\$195
Effective Database Design 3 days, Mar 16-18 9-4 PM,	
Ramada Renaissance Hotel, Brian Mullen,	\$575
Database Systems for the PC: Microcomputer Lab, Old	
Bookstore UBC, 9:30-4 PM Sat Mar 26	\$95
VANCOUVER COMMUNITY COLLEGE, LANGARA	
875-8200	
dBase III/III+ 9-4:30 PM, Sat Mar 19	\$85
Programming with dBase III/dBase III+	
9-4:30 PM, one session, Sat Mar 26	\$85
VANCOUVER SOFTWARE CENTRE	
300-1190 Melville St, Shirley Friesen-Nicol 699-9800	
Introduction to dBASE III+	
9-5 PM Fri March 4, repeats Mar 18	\$180
dBASE III+ Intermediate	
9-5 PM Fri March 11, repeats Mar 25	\$180

DESKTOP PUBLISHING

ADVANTAGE COMPUTERS 4324 Kingsway, Burnaby 430-3113 (Paolo Bertoia)	
call for March Schedule on Macintosh DTP courses	
BEHNSEN GRAPHIC SUPPLIES	
1016 Richards St, Vancouver, 681-7351	
Lightspeed Colour Layout on the Mac II	
Sat Mar 12, 11:30-1 PM	Free
MINICAD (Mac) Sat Mar 19, 11:30-1 PM	Free
DESKTOP PUBLISHING TRAINING CENTRE	

400 1190 Melville St., 669-9800, Mary Jane Devine	
Intro to Desktop Publishing Mar 7	\$149
Hands-on Intro to Ventura Mar 1 & 2	\$495
Hands-on Intro to Pagemaker Mar 15 & 16	\$495
Hands-on Intro to Spellbinder Mar 17 & 18	\$495
Hands-on Intro to Ventura Mar 22 & 23	\$495
Overview of Pagemaker Thurs Mar 3	\$99
Overview of Spellbinder Thurs Mar 10	\$99
Overview of Ventura Mon Mar 14	\$99
Overview of Pagemaker Thurs Mar 24	\$99
Advanced Ventura Fri Mar 11	\$189
Advanced Ventura Mon Mar 28	\$189
DOPPLER TRAINING CENTRE	
101 W. 5th, Vancouver 875-0261	
Ventura Tue Mar 18 & 22	\$350
Pagemaker Thu Mar 24 & 25	\$350
FIALA, BONNER & ASSOCIATES	
810-1112 W Pender St, Vancouver, 684-1022	
Ventura Mon Mar 7	\$250
PRECEPT COMPUTER LEARNING CENTRE	
735 Clark Dr, Vancouver, 255-3198	
DTP Using Ventura Mar 7-8, 1-5:30 PM,	\$190
Introduction to Desktop Publishing	
Mar 17-18, 9-12 noon	\$130
DTP with Pagemaker Mar 21/22/23-5:30 PM	\$190
SIMON FRASER UNIVERSITY Downtown 687-4255	
Desktop Publishing Tools: Alternative Approaches DTP:	
Tue Mar 22	\$160
UBC 222-5222	
DTP: Pagemaker on the Mac Km 121, Computer Science	
Bldg 9:30-1 PM, Mar 12,13,19th	\$185
Intro to Desktop Publishing 2 sessions McKay Training	
Centre, Luinda Bleackley, March 12, 9:30-1 PM &	
Mar 19, 9-5 PM	\$
VANCOUVER ELECTRONIC PUBLISHING ASSOC. BC	
Club, 750 Pacific Blvd S., Vancouver, 731-5887	
General Meeting: THE OFFICE PUBLISHER &	
Computer Publications, Mon. Mar 7	Free
Mac Pagemaker SIG	
Nelson Reust 683-2341 Wed Mar 9	Free
Basic Postscript 7-10 PM, 986-0454, Georg Hoevel,	
Thursday Mar 10,	\$50
Intermediate Postscript 986-0454, Georg Hoevel,	
Thursday Mar 21,	\$50
Anatomy of Type Seminar McKay Technical Institute, 7-10	
PM, Mon March 28	\$50
An Introduction to Desktop Publishing	
BC Club 7-10 PM Tue Mar 29	\$35
Page Layout Seminar BC Club 7 PM, Theo	
294-3451, Mon March 14,	\$50
VANCOUVER COMMUNITY COLLEGE, LANGARA	
Room A210, 875-8200	
Desktop Publishing Pagemaker	
7-10 PM, 5 weeks, Wed Mar 30	\$150
VANCOUVER DESKTOP PUBLISHING CENTRE Ltd	
1150 Homer St 681-9161 Steve Osborne, Roedy Green	
Ventura Junior Level full day Tues Mar 15	\$159
Ventura Junior Level 7-10 PM Mar 7 & 9	\$159
Ventura Senior Level full day Tues Mar 29	\$159
Desktop Design Clinics Thurs Mar 17	\$69
Desktop Design Clinics Mon Mar 28	\$69

EXPERT SYSTEMS

CAMOSUN COLLEGE COMPUTER DEPARTMENT	
592-1281 ext 453	
Knowledge-Based Systems, 3 even/week for 11 weeks.	
Intro to knowledge based systems. Application of artificial	
intelligence. Mon Mar 14	
VANCOUVER COMMUNITY COLLEGE, LANGARA	
A210, 875-8200	
Introduction to Expert Systems	
7-10 PM, 5 weeks, Mon Mar 28	\$150

GENERAL

Amlga User Group Meeting PaNorAma, Sunset Community	
Association (Fraser & 51st) Dave Allen 270-0064.	
General Meeting Wed Mar 9	
Workshop: Tues Mar 1	
Programmers: Wed Mar 23, BCIT 7:30 PM	
Apple Business Forum Apple Canada, Westin Bayshore,	
9-5 PM, 1-800-387-9683 ext 50,	
March 1	Free
Apple II User Group Meeting BC Apple Society, Burnaby	
Rugby Club, Kiyo Masuda 437-9935 General Meeting	
CD-ROM Conference: The Industry Emerges	
Microsoft (206) 882-8080 Sheridan Hotel & Westin Hotel,	
Seattle WA, March 1-3	\$950 US
Computer Swap Meet Computer Fair Association, Sunset	
Community Assoc. (Fraser & 51st) call for tables Dave Allen	

270-0064. Sat, Apr 30	
Computerland Show Computerland, Hyatt Regency, displays	
by Computerland suppliers, 687-5545 March 2, 3 & 4. Wed	
Mar 2	\$10
Free Trade & Hi-Tech CATA, Hyatt Regency Hotel, Keith	
McPherson 684-1522 Ottawa, electronics companies &	
accounting representatives. Wed Mar 2	
Kaypro User Group/ Portable Computer Club Hugh Taylor	
253-4949	
Mac User Group Meeting BC Apple Society, WCB Building,	
6951 Westminster Hwy (Kiyo Masuda) 437-9935. General	
Meeting election of officers Wed Mar 23	
Mainland Mac Meeting 7:30 PM Wed Mar 9 Rm 115	
Kwantlen College, Surrey, Les Robertson 437-9935	
Maple Ridge Computer User Group 467-2647 M.R. Sr.	
Secondary School 7:30 PM, Tues Mar 8	Free
Palm Sunday Sun Mar 27	
St. Patrick's Day Thu Mar 17	
Surrey Microcomputer User Group 526-6221	
Tandy 1000+ Computer Club Len Boscoe 574-7438	
Vancouver APL User Group 298-3081 Andrew Seary	
Vancouver PC Users Group, Topic: Laptop Computers H.R.	
MacMillan Planetarium 438-6009, \$20/year membership, 7:30	
PM Thu Mar 10	
West Coast Computer Society 255-4485 Dave Wiens	

INTEGRATED SOFTWARE

VANCOUVER SOFTWARE CENTRE	
300-1190 Melville St., Shirley Friesen-Nicol 699-9800	
Introduction to FRAMEWORK II	
9-5 PM Mon Mar 14, repeats Mar 19 & 28	\$180
FRAMEWORK II Intermediate	
9-5 PM Mon Mar 7, repeats Mar 21	\$180

LOCAL AREA NETWORKS

VANCOUVER NETWORK USER GROUP	
Mary Jane Woods 275-2829.	
Local Area Network User Group Mon Mar 7	
DATA PROCESSING MANAGEMENT ASSOC.	
Stanley Park Pavilion, Helen Rutan 435-3272	
LANs in Office Automation, starts at 4:30 PM. Speaker: Ian	
Reed VP Computech, Tech Standards. Dinner 6:30 PM. Tue	
Mar 15	\$30
UBC 222-5222	
Local Area Networks: an Overview 10 AM - 1 PM, Room	
G41, Woodward Bldg, UBC, Sat Mar 19	\$60

PROGRAMMING & SOFTWARE DEVELOPMENT

HI-TECH PRESS Discovery Park, 3700 Gilmore Way,	
Burnaby, Joanne Woodward 430-3533	
Opening an Office in the US 6 PM	
Thur Mar 10	\$10
PRECEPT COMPUTER LEARNING CENTRE	
735 Clark Dr, Vancouver, 255-3198	
Introduction to Programming in "C"	
4 evenings Mar 29/31, Apr 5/7, 7-9 PM,	\$140
PRIMA TRAINING CENTRE	
207-3900 E Hastings, Burnaby, 294-4567	
Advanced Turbo Pascal	
4 weeks, 7-10 PM, Mon Mar 7	\$150
Programming in PROLOG	
4 weeks, 7-10 PM, Tue Mar 8	\$150
Advanced Turbo C	
4 weeks, 7-10 PM Wed Mar 9	\$150
SFU Downtown	
549 Howe St, Vancouver 681-4987	
Legal Considerations for Marketing Software	
1-4:30 PM. Tue Mar 8	\$85
UBC 222-5222	
Introduction to BASIC 6 Tuesdays, 7-10 PM, Microcom-	
puter Lab, Old Bookstore, Instructors: Dave Repchuk &	
Andrew Bates, Tue Mar 1	\$185
Inside the Macintosh A Technical Perspective 4 Wednes-	
days, 7-9 PM, Rm 460, Computer Science Bldg, UBC	
Wed Mar 2	\$85
Advanced C Programming Mar 12-19-26, Rm C65,	
Woodward Bldg, UBC, Alan Ballard	\$350
VANCOUVER COMMUNITY COLLEGE, LANGARA	
875-8200	
BASIC Programming for Beginners II	
9-12 noon, 5 weeks Sat Mar 5	\$55

SPREADSHEETS

ADVANTAGE COMPUTERS 4324 Kingsway, Burnaby 430-3113 (Paolo Bertoia)	
call for Schedule on Macintosh spreadsheet courses	

COMPUTER STATION

2130 Burrard St, Vancouver, Pat Austin 732-8621

Advanced Lotus 1-2-3 Thu Mar 3	\$175
Fast Track Lotus 1-2-3 Wed Mar 9 & 10	\$325
Fast Track Lotus 1-2-3 Wed Mar 17 & 18	\$325
Fast Track Lotus 1-2-3 Wed Mar 28 & 29	\$325

DOPPLER TRAINING CENTRE

101 W. 5th, Vancouver 875-0261,

Lotus 123 Level 1 Tue Mar 15	\$159
Lotus 123 Level 1 Tue Mar 29	\$159

(students may take first day separately for \$175)

FIALA, BONNER & ASSOCIATES

810-1112 W Pender St. Vancouver, 684-1022

Lotus 123 Level 1 Thurs Mar 3	175
Lotus 123 Level 1 Wed Mar 9	175
Lotus 123 Level 1 Mon Mar 21	175
Lotus 123 Level 1 Thurs Mar 31	175
Lotus 123 Level 2 Tues Mar 15	175
Lotus 123 Level 2 Fri Mar 25	175

PBSC TRAINING CENTRE

1350-1140 W Pender St, Sue Threlfall 732-1211

Intro to Lotus 1-2-3 9-5 PM, Thu Mar 3	\$165
Intermediate Lotus 9-5 PM Fri Mar 4	\$165
Advanced Lotus 9-5 PM Fri Mar 4	\$165

PRECEPT COMPUTER LEARNING CENTRE

735 Clark Dr, 255-3198

Electronic Spreadsheets (Lotus 1-2-3)	
2 sessions, 1-5 PM, Mar 14-15,	\$140
Advanced Spreadsheet Skills	
2 sessions, 1-5 PM, Mar 28-29	\$140

PRIMA TRAINING CENTRE

207-3900 E Hastings, 294-4567

Lotus 1-2-3 Macro Programming	
2 sessions, 7-10 PM, Mon Mar 7	\$75
Lotus 1-2-3 Management & Graphs	
2 sessions, 1-5 PM, Fri Mar 18	\$75

UBC 222-5222

Lotus 1-2-3 Learning to use the Spreadsheet Tool,	
Location TBA, 7-10 PM, Tue Mar 1	\$195
Advanced Lotus 1-2-3 Improving Your Productivity with	
Macros, 2 days, Mar 24-25, 9-4 PM, Microcomputer Lab,	
Old Bookstore UBC	\$250

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1 day, 9-4 PM Sat Mar 26 \$75

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DOS Orientation 9-5 PM Tue Mar 8, \$180

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Introduction to MSDOS Mar 14 & 16 \$119

Introduction to MSDOS Mar 21 & 23 \$119

Taking Command of MSDOS Mar 11 \$69

Taking Command of MSDOS Mar 30 \$69

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SuperCharging the Office PC Mar 12 \$129

Under the Hood: Troubleshooting the Hardware

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Word Perfect Level 1, Thu Mar 10 \$159

Word Perfect Level 2, Fri Mar 11 \$159

Multimate Tue Mar 22 \$159

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Multimate Advantage Lev. 1 Thu Mar 24 \$175

Word Level 1 Wed Mar 2 \$175

Word Level 1 Mon Mar 14 \$175

Word Level 1 Tue Mar 29 \$175

WordPerfect Level 1 Fri Mar 4 \$175

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WordPerfect Level 2 Thu Mar 10 \$175

WordPerfect Level 2 Wed Mar 30 \$175

Displaywrite 4 Level 1 Fri Mar 11 \$175

Displaywrite 3 Level 1 Mon Mar 28 \$175

Wordstar 2000 Level 1 Thu Mar 17 \$175

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Advanced MICROSOFT Word 1-5 PM, \$140

Mar 24-25 \$140

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Using WordPerfect 7-10 PM 4 Tues., \$150

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Introduction to Word Perfect \$180

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9-5 PM Thurs March 17, \$180

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9-5 PM Thurs March 31 \$180

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UBC 222-5222

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Thu Mar 10 \$180

THE SHAREWARE SHELF PC-WRITE

Shareware-Public Domain-User-Supported?

What is it, and what do the different terms mean? Many people are unsure, or tend to confuse them.

Public Domain software is not copyrighted by its authors who seek no formal rights or royalties. The works can be used with few or no restrictions. This type of software can be found on the many bulletin boards around the country and in software interest group libraries like PC-Blue and PC-SIG.

Shareware and User-Supported software may contain copyrighted programs. These authors are utilizing a different approach to marketing their software. To eliminate costly marketing, promotion and packaging, you purchase the software directly from the author, at a fraction of the cost of commercial software, putting the savings in your pocket.

You are encouraged to purchase this type of software from libraries, like PC-SIG, for the cost of distributing the disk. Most disks contain the entire software program, but there are a few which are demo-only or have limited or restricted capabilities. Users are encouraged to examine the software to see if it fits their individual needs, or to pass it on to friends. If the program fulfills your requirements, you are asked to register with the software author.

Registration entails paying a fee to the author. In return, most authors provide full documentation, technical assistance, and updates as they develop. The authors usually encourage your suggestions to help improve the program.

The Shareware and User-Supported concepts grew from a need to provide better, low-cost software to the public. User-Supported software often provides the public with innovative, creative, and unique software that would otherwise not be available on the commercial market.

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PC-WRITE Version 2.71

PC-Write is a User-Supported word processor from Quicksoft Inc of Seattle, WA. It was developed by Bob Wallace with the novice and experienced user in mind. The novice will find PC-Write commands easy to learn, while the experienced user will find most of the features found in software costing hundreds of dollars.

PC-Write comes complete with 45 help screens for the beginner to word processing. Other features include instant 50,000 word spell checker, auto paragraph reformat, decimal tabs, footnotes, endnotes, headers, auto page numbering, search and replace (with wildcards), block move-copy-delete, automatic index and table of contents, left-right page layouts, mail merge, DOS shell, and macros. PC-Write also contains split-screen capabilities to edit two files and screen clip text from other software.

PC-Write supports 350 printers, LaserJet™ and PostScript™, or you can customize the print file yourself. PC-Write in addition to its own commands, supports Wordstar™ commands and files, as well as dot commands for custom lay-out and printing.

Registered users of PC-Write receive a 350 page bound user's manual, two free updates, one year of technical support, and other benefits. Version 3.0 is expected later this year, and promises to be even more enhanced.

Registration for PC-Write costs \$89 US

Gordon Simmonds is the owner of Sim-Com Services, a Surrey computer firm specializing in Shareware & User Supported Software. He can be reached at 585-2326

MARCH 1988

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

TELECOMMUNICATIONS

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Managing a Modem 10-4:30 Thurs Mar 31 \$129

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Data Communications: A User's Guide, 10-2 PM, Room	
201, Westbrook Bldg, UBC, Sat Mar 12	\$75

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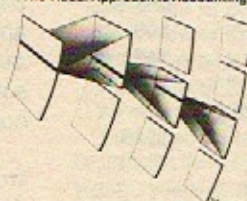
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NEWSBYTES Continued from Page 8

*An 80286-based PS/2 model in the \$1,300-2,300 price range within the year. By the end of 1989, the entire PS/2 line will be built around the Intel 80386 processor.

*PC-DOS 3.4 shipping during the first half of this year.

*A 32-bit version of OS/2 shipping next year.

Mainly, the announcements confirm details of reports in last week's NEWSBYTES EUROPE. Some of Peter Vekinis' exclusives are still exclusive, however, most notably the new PS/2 portable which will compete with the Toshiba 3100. **CONTACT:** Pam Evans, IBM (404)238-3643

COGNOS RELEASES SOFTWARE FOR IBM AT, ANNOUNCES HP DEAL

OTTAWA (NB) — Cognos Inc. has announced a significant deal in its original software market and a move into a new one.

Cognos announced availability of Powerhouse, its application development tool, for the IBM Personal Computer AT and compatible micros. The move, which had been promised some months ago, puts Cognos in the PC software business for the first time. Versions of Powerhouse already exist for minicomputers from Hewlett-Packard Co., Digital Equipment Corp. and Data General Corp.

Cognos also announced a two-year agreement giving Hewlett-Packard an internal license for the use of Powerhouse. That means HP — for whose hardware Powerhouse was originally developed — will be able to use the development tool internally in any of its divisions. The agreement also covers related Cognos software products: PowerPlan, Graphics, Architect and The Expert. Cognos will also provide technical support to HP, which already uses Cognos products. **CONTACT:** Pierre Viau, COGNOS INC., 3755 Riverside Dr., Ottawa, Ont. K1G 3Z4, (613) 738-1440

LIVING VIDEOTEXT, Mountain View, Ca., is expected to introduce a competitor to Lotus' Agenda for the PC next month, according to a published report. The product called GrandView is said to have features not found in Agenda and will sell for \$100 less — \$299.

SHAREWARE GOES UPMARKET WITH ITS OWN MAGAZINE AND A CD-ROM

SUNNYVALE, CA (NB) — The PC-SIG Library in Sunnyvale has one of the world's largest collections of shareware, programs you can use now and pay for later. PC-WRITE, the program used at NEWSBYTES SOUTH, is an example of shareware. I can make copies for friends easily and legally. If they like it they send in money for the manual and support. Now shareware users (who own IBM PCs or compatibles) have a regular place to turn, as PC-SIG has begun publishing "Shareware Magazine." The magazine features capsule reviews, columns and breathless features about how neat shareware is. NEWSBYTES SOUTH talked recently to Chuck Botsford of PC-SIG, who notes that the group is mainly a distribution service. Chuck is publishing the group's whole library on a single CD-ROM, for about \$300. You can also get a printed index and any individual programs from the library on floppy disks or through dealers. **CONTACT:** Chuck Botsford, PC-SIG, (408)730-9291

MAPINFO DEBUTS PC MAPPING PROGRAM

TROY, N.Y. (NB) — MapInfo, a new program from MapInfo Corp., will analyze information in existing databases and visually display the results in a variety of map formats. The \$750 program allows users to load in data from the keyboard, or directly from dBase III files. The program will then locate a data point at any street address on the map, search for points within specified boundaries, window the data to the screen, and determine the latitude or longitude of any point on the map. The software runs on PCs and clones and requires 640 K of RAM and a hard disk. It will run with Hercules monochrome graphics, or EGA color graphics. Digitized maps are sold separately from between \$95 and \$2000. **CONTACT:** MapInfo Corp., 200 Broadway, Troy N.Y., 12180, 1-800-FAST-MAP (In N.Y., call 518-274-8673).

OGIVAR IN JOINT VENTURE WITH JAPANESE FIRM

MONTREAL (NB) — Ogivar Technologies has signed a joint-venture agreement with AI Electronics Corp. of Japan for the production of a line of laptop computers. AI Electronics, which was already supplying plasma screen technology for Ogivar's System IV laptop, gets the right to build the System IV for the Asian market. Jaime Benchemol, president of Ogivar, said the two companies plan to introduce three more laptop models over the next three or four years. AI Electronics will sell these in Asia while Ogivar sells them in the rest of the world, he said.

Ogivar introduced the System IV at the Comdex show in Las Vegas in November and is currently shipping it. AI Electronics is now setting up its plant to manufacture the laptop for the Asian market, Benchemol said. **CONTACT:** Ogivar Technologies, 7200 Transcanadienne, Montreal, Que. H4T 1A3, (514) 737-3340

MAJOR RESTRUCTURING

NEW YORK (NB) — Facing Wall Street pressure to show results from his leadership, International Business Machines Corp. Chairman John Akers has unveiled a major management-shuffling. Akers' intent is to decentralize decision-making authority in IBM, which many analysts feel has been suffering from business arteries clogged by bureaucracy. Akers' move came a week after Big Blue announced that, but for some special items, IBM's 1987 earnings would have decline for the third straight year. Akers said the changes are "as significant as any we've ever had" and the most important since Tom Watson Jr. succeeded his late father as IBM chief in 1956.

The restructuring establishes five "highly independent systems and technology businesses," according to IBM, along with a new organization, IBM United States, responsible for all U.S. business. The new businesses and IBM U.S. will have full day-to-day operational authority. IBM Senior Vice President Terry Lautenbach is the new general manager of IBM U.S. Among those five independent "businesses" is IBM Personal Systems, responsible for personal systems, displays, most printers, typewriters, copies, desktop publishing, consumers systems, and related operating systems.

NEW IBM KEYPAD TALKS TO THE BLIND

NEW YORK (NB) — IBM has developed a keypad that allows blind users to hear text on the PS/2 personal computer. It is the first entry in IBM's Independence Series of products designed to handicapped computer users. The IBM PS/2 Screen Reader package, at \$600, consists of an adaptive keypad, software, documentation, and support and works on single computer or in networks. A text-to-voice synthesizer is also necessary for Screen Reader to

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work. IBM says Screen Reader would increase independence of the visually handicapped, allowing them to perform the same functions with a computer as other users. The product will be available in March, according to Big Blue. IBM says it tested the program with more than 70 visually impaired IBM employees across the country.

BULL SELLS JAPANESE LAPTOP COMPUTER

TOKYO (NB) — Yokohama-based personal computer maker Sortec has signed an OEM-supply contract for laptop computers with Bull in France. In the agreement, Sortec will supply Bull with its IBM PC/AT-compatible laptop computer, the Snap. Then, Bull will market the computer under the brand name of Lattache in Europe. 10,000 units, which amounts to a deal worth \$15.7 million, are expected to be sold the first year.

Currently, the Snap is sold in the U.S. market by Atlanta-based DataView, receiving the OEM supply of the product from Sortec. The Snap has an NEC's V20 microprocessing unit, and a FDD or a HDD.

UNIX

SUN MICROSYSTEMS, Mountain View, Ca., has named William Randolph Hearst III, publisher of THE EXAMINER, to its board of directors. Hearst, a well-known computer enthusiast, says he's pleased and honored to be chosen and has a "healthy regard" for Sun Microsystems. SUN MICROSYSTEMS also jilted Apple within the last six months, according to the SAN FRANCISCO EXAMINER. The paper quotes reliable sources as saying that Apple CEO John Sculley offered to buy Sun using some of Apple's \$500 million cash reserve. But the offer was refused, says the paper, for two reasons — Sun didn't WANT to be acquired, and few of its key employees care for Apple Computer.

HEWLETT PACKARD CLAIMS HIGHEST PERFORMING WORKSTATION

PALO ALTO, Ca. (NB) — Hewlett Packard has introduced an add-on circuit board which makes its HP 9000 Model 825SRX workstation the highest performing in the market, according to the company. The CPU upgrade triples the speed of the workstation to 2.0 MFLOPS from 1.0 million floating point operations per second. That speed is said to be 75% faster than competing workstations from Sun and Silicon Graphics. HP says the MIPS (millions of instructions per second) rating for its upgraded systems has increased from eight to 14 (or 14 times the performance of the Digital VAX 11/780.)

The upgrade costs \$10,000.

ATARI TO ENTER WORKSTATION MARKET

SUNNYVALE, Ca. (NB) — Atari will introduce a line of 68030-based Unix workstations at West Germany's Hannover Fair computer show in March, says Atari CEO Sam Tramiel in a published report. Details are sketchy (some of them you've read in our European reports) but it's clear Atari plans to low-ball the price in order to gain a hold in the workstation market.

In other Atari news, the firm has succeeded in getting court injunctions against six Singapore firms accused of dealing in pirated copies of Atari games. Authorities seized more than \$64,000 worth of pirated games which reportedly arrived in Singapore via Taiwan.

IBM BOARDS THE UNIX EXPRESS

RYE BROOK, N.Y. (NB) — International Business Machines Corp. is making a pitch for the UNIX operating system, joining a growing bandwagon that now includes Apple Computer, Microsoft, and Sun Microsystems. William Lowe, IBM's personal computer chief, told reporters at the UniForm UNIX conference in Dallas that "IBM pledges to achieve a leadership role in the high-performance UNIX workstation world." The vehicle for IBM's venture into UNIX is the IBM PC RT, the reduced instruction set PC that IBM announced two years ago. By next year, Lowe said, IBM AIX-family workstations (AIX is Big Blue's dialect of UNIX) "will have more than four times the performance and memory of today's RT PC."

At the same time, IBM announced that the National Bureau of Standards in Gaithersburg, Md., will develop conformance tests for UNIX-based software. The tests will measure how well programs conform to proposed UNIX standards developed by the Institute of Electrical and Electronics Engineers. Development work will be done on a PC RT running IBM's AIX.

Also on the IBM front, there are persistent rumors in the industry that IBM may have some new PS/2 hardware ready for display to the public soon. Big Blue is already scheduled to unveil some new OS software for its mainframes. But some who follow the company are also expecting some

announcements from the low end, including, perhaps, a couple of models filling in the holes in the PS/2 line and maybe some upgrades of 80286 machines to the 80386 processor.

X WINDOWS WINS BACKING

CAMBRIDGE, Mass. (NB) — A dozen major computer companies are ponying up \$150,000 each to support development of Massachusetts Institute of Technology's X Windows as a standard for multiple displays on computer screens. MIT has been developing X Windows for three years. A standard will make it easier to write software that will run on a variety of machines, X Windows developer Robert Scheifler says. Joining the X Windows consortium are IBM, Digital Equipment Corp., AT&T, Hewlett-Packard, Apple, Sony, Apollo, CalComp, Sequent Computer Systems, Sun Microsystems, Tektronix, and Xerox.

SUN INTRODUCES DESKTOP SUPERCOMPUTER

MOUNTAIN VIEW, Ca. (NB) — At a packed news conference, Sun Microsystems has unveiled what it calls the first supercomputer to fit on a desktop, the Sun 4/110 workstation. Based on Sun's SPARC reduced instruction set architecture, the \$18,900 workstation delivers seven times the speed of a DEC Vax 11/780 or seven million calculations per second. It uses Sun's own operating systems, C, FORTRAN, and Pascal but will also make use of the coming version of Unix being designed by Sun and AT&T. The workstation has 8 megabytes of main memory and a monochrome monitor.

While showing this price/performance breakthrough, Sun also announced it is raising the price of one of its workstations. The Sun-3/60 workstation is up \$1,000 to \$8,900 due to an increase in component costs and specifically an increase in the cost of one megabit computer memory chips. Commenting on the Sun/AT&T alliance which has raised hackles throughout the Unix world, Sun executive Ed Zander defended the project, saying, "We believe we can offer an alternative to the closed, proprietary systems of DEC and IBM." He called for his detractors to rally around in support of the joint development effort.

SUN MICROSYSTEMS TO INTRODUCE DESKTOP SUPERCOMPUTER

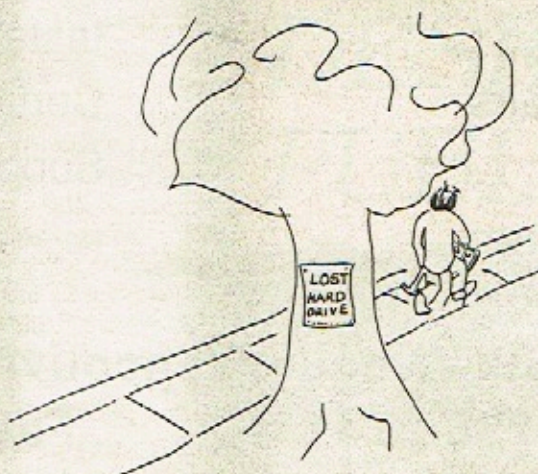
MOUNTAIN VIEW, Ca. (NB) — Sun Microsystems is expected to unveil a low-cost supercomputer this week, capable of processing information at a rate of 4 to 7 million instructions per second. The desktop machine, expected to be priced between \$10,000 and \$15,000, is based on Sun's SPARC, or reduced instruction chip set.

TOSHIBA UNVEILS UNIX PORTABLE COMPUTER

TOKYO (NB) — A Toshiba spokesman says the company has developed a Unix-based desktop portable computer the T8200. It has an 80386 MPU, a 4M memory (12M at maximum), a 100M HDD (200M at maximum) and a 3.5-inch FDD. The T8200 will be shown at the Uniforum conference in Dallas, Tex. on February 8. It will be released in August. The price has not been announced yet.

Meanwhile, Toshiba has developed a Unix program for its T5100 laptop computer. The program supports a multiuser feature connecting up to 4 terminals. The program will also be shown at the Uniforum next week. Its release date will be in May.

CONTACT: Toshiba America, Inc. Information Systems Division, 9740 Irvine Boulevard, Irvine, CA 92718, U.S.A. (1-800-457-7777)



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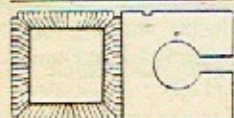
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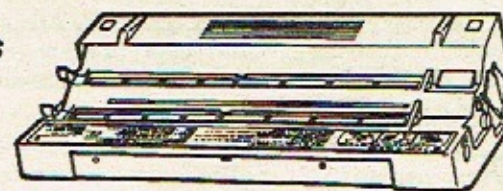
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